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RURAL HIGH SCHOOL STUDENTS' PERCEPTIONS OF CHALLENGES, ASSISTANCE REQUIRED, AND SUPPORT FOR POSTSECONDARY EDUCATION

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By

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ABSTRACT

RURAL HIGH SCHOOL STUDENTS' PERCEPTIONS OF CHALLENGES, ASSISTANCE REQUIRED, AND SUPPORT FOR POSTSECONDARY EDUCATION

By

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Michigan's Upper Peninsula (U.P.) has high rates of poverty, unemployment, and geographic isolation, which are possible influences on postsecondary education goals of high school students. Participants from seven different U.P. high schools completed 265 surveys and 21 interviews on perceived challenges, assistance required, and support for postsecondary education. Both first-generation college students and non first-generation college students reported high educational goals, but a statistically significant number of first-generation students indicated a barrier to achieving a postsecondary education was "not enough financial aid". A significant proportion of female high school students wanted a postsecondary education when compared to males. Females most frequently selected "difficulty of college classes" as a potential barrier to achieving their educational goals, while males most frequently selected "lack of motivation". All participants indicated a desire for increased knowledge in how to prepare college applications and search for financial aid. Participants indicated "learning how to do math" would require the most assistance for them to achieve their postsecondary educational goals. A disturbing finding by age noted a significant number of older high school students who selected a high school diploma as their highest education goal. This research will be shared with U.P. educators to help make postsecondary success an option for all students.

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In addition to the thesis team at Northern Michigan University who helped guide me through the thesis process, the quality of work would not have happened without the continuous support of my friends and family. The debt of gratitude towards those important people in my life has been continuous. My hope is to one day help close the gap for underrepresented students, and without the continued support of my friends and family in my life, this mission would not be possible.

Last, but certainly not least, thank you to all of the education professionals and staff who took time out of their busy schedules to assist with this research and allow me to conduct my surveys in their schools. Your enthusiasm and assistance will help close the gap for underrepresented students in postsecondary education. I hope to assist in making an equal opportunity for education a reality for everyone. Thank you for everything you do!

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Chapter One: Introduction

The format prescribed by the Publication manual of the American Psychological Association 5th edition has been used in writing this thesis.

An assumption throughout this thesis is success at the postsecondary level is imperative to the future success of our next generation. The dynamic world we live in consists of economic downturns, rapid technological advances, and many of Michigan's historical blue-collar jobs contracted overseas to countries with lower labor costs. How do Americans from disadvantaged backgrounds cope and succeed with such uncontrollable changes? In the past workers could train on the job, but today postsecondary degrees are being used as gatekeepers for employment and as avenues to train employees. The economy appears to have placed a demand on more postsecondary level workers. Education has become the way to counteract economic instability, unpredictable global markets, and dependency on the economic support systems such as welfare (Carnevale, Strohl, & Smith, 2009).

Historically students from first-generation families face many challenges when compared to their higher socioeconomic peers. Challenges include having less family involvement in their education, academically insufficient backgrounds, increased enrollments in remedial classes, and lack of financial literacy and knowledge in how to prepare financially for going to college, admissions procedures, and connecting career goals and educational requirements (Tym, McMillion, Barone, & Webster, 2004). A study completed by the National Education Longitudinal Study compared students'

family academic and income statuses with those who attended postsecondary education (PSE) within two years of completing high school. Students from families without a parent graduating with a degree attended college at almost half the rate (59% attendance) as students who had two parents graduate from college (93% attendance) (Hudley et al., 2009). The results suggest high school students coming from families where postsecondary success was not prevalent have access to influences other than family to establish PSE as a goal.

The current study explores a sample of underrepresented rural Upper Peninsula (U.P.) of Michigan high school students' perceived understanding of challenges, adult support, and personal needs for having PSE as a viable goal. Using participants' interviews and surveys and drawing from the educational research literature, this thesis concludes with best practices for educational professionals to assist low income, first-generation students to attend college.

Chapter 1 of this thesis includes the background of the problem, purpose of the study, research questions, theoretical framework, definition of terms, and assumptions of the study. Chapter 2 continues with a review of pertinent literature looking at the culture of U.P. students, family capital, and rural versus urban discrepancies. Chapter 3 examines the survey and interview methodology of the research including the appropriateness of the research design, number of participants, procedures, directions for cooperating instructors, and how the data was analyzed. Chapter 4 examines the results by the participants' perceived needs and parents' education level, gender, and age. Chapter 5 explores the results and implications for secondary and PSE professionals, parents, and

students and has a review of the study and recommendations to parents, participants, and educational professionals in the rural areas. Each chapter concludes with a summary.

Background of Problem

In 1960, 45.1% of high school graduates attended some sort of degree granting college, which is in sharp contrast to the 2008 record high of 68.6% graduates attending college (Postsecondary Education Opportunity information [PEO], 2009, p. 1). According to the United States Department of Labor, 73% of the 30 fastest growing jobs in the United States for the year 2016 will require at least some PSE. Future job holders will not only have to attend college, but three-quarters of them will have to obtain at least a vocational degree to hold a job in the fastest growing job sectors.

Table 1.

PEO College Continuation Rates for Recent High School Graduates 1959 to 2008

Year	1960	1965	1970	1975	1980	1985	1990	1995	2000	2005	2008
Cont. Rates in Percent	45.1	50.9	51.6	50.7	40.3	57.7	59.6	61.9	63.5	68.6	68.6

Note. The continuation rates (Cont. Rates) are the percentage of high school graduates attending PSE by October of the year following graduation.

The trend in Table 1 depicts more high school students going to college now than ever before. The trend does not breakdown the demographics of students choosing to attend postsecondary institutions. Considering geographic location, only 17% of rural adults age 25 and older have a college degree, but half of urban adults age 25 and older hold a college degree (Alliance for Excellent Education, 2010, p. 3), this is about a three-fold difference. In addition, people inhabiting remote, rural locations historically have the highest poverty rates in America. Living in rural poverty typically comes with drawbacks

including inadequate schools, physical isolation, and poor public services (Lichter, & Johnson, 2007). For a variety of reasons, students from rural areas are not going to college at the same rates as urban students. What factors contribute to less than one-third of rural adults obtaining a college degree relative to their urban counterparts? Low socioeconomic and rural wage levels may not allow families to save money for PSE as a goal or encourage PSE. Distance to colleges and universities are greater for rural students and travel to and from home might be a problem. Rural parents in disproportionate numbers appear to lack education beyond high school, and less qualified teachers with fewer opportunities to take advanced placement classes are apparently unavailable to rural students at the same rates as urban students (Gibbs, 2000).

Successful PSE rates could be very important in rural locations like the U.P., where unemployment and poverty levels run higher than national averages. According to the U.S. Census Bureau (2008), the national unemployment rate in the United States was 9.3%. Eleven of the fifteen counties in the U.P. matched or exceeded that number including Mackinac County (27.6%), which nearly triples the national average. According to a report by the US Department of Agriculture (2009), approximately one-third of all U.S. students in grades K-12 are eligible to receive free or reduced hot lunch. In 2008, 36.32% (4,848 out of 13,349) of public U.P. high school students in grades 9-12 received free or reduced hot lunch according to statistics compiled from the State of Michigan website and Center for Educational Performance and Information (2008). The U.S. Department of Agriculture predicts less than three-quarters of students who are eligible for free or reduced hot lunch actually complete the process of becoming eligible

for the service. Therefore, in the U.P. where unemployment runs above national levels, this statistic might be low.

One of the largest drawbacks of rural educational research is defining "rural", which is a fundamental question that varies between research projects. Another consistent problem with rural educational research is the rareness of randomized research designs and adequate control or comparison groups. Arnold, Gaddy, and Dean (2004) used an instrument developed by Midcontinent Research for Education and Learning (MCREL) to examine the quality of rural educational research. Arnold et al. examined 106 research articles and found only 21% of all rural education research was of high quality.

The lack of past quality research leads to a lack of government and other funding sources, which then prohibits future studies (Arnold et al., 2005). Considering the fact "one in five public school students attends a rural school and almost one third of all public schools are located in rural areas" (Johnson, & Strange, 2005, p. 3), a need exists to determine a deeper understanding of how to help rural students consider PSE as an option. According to the Rural School and Community Trust (2009), 323,000 students comprise the rural student community of Michigan in 2009 and 40,839 of those students are spread across 59 schools in 15 counties stretching across the U.P. The U.P. has a population density of 18.7, which is similar to the state of Nevada's 18.2 population density and which places the U.P. in the bottom 10% of the nation in population (U.S. Census Bureau, 2000).

The U.P. is a physically isolated area surrounded on three sides by water and connected to the rest of Michigan only by the Mackinaw Bridge. The area's isolation makes for an ideal environment for cultural trends like low-socioeconomic status (SES)

to persist. These limitations have provided little research data from rural communities and almost no data about the successes or struggles of high school students considering a PSE.

Purpose of Study

The purpose of this study is to assist educational professionals with information to help make postsecondary success an option for students in rural areas plagued by low SES. Establishing postsecondary success as a viable option is not an easy task. The problem has been recognized at the highest levels of our government. On February 24, 2009, President Barack Obama addressed the Congress of the United States with his State of the Nation speech. The President stated a national goal of having the "highest proportion of college graduates in the world" by the year 2020. Helping high school students from underrepresented first-generation, low-income, rural populations attain this goal requires knowledge about students' perceived difficulties and available support to obtain a degree at a postsecondary institution successfully. The purpose of this study is to provide educational professionals with information about rural U.P. high school youth to help educators make PSE goals an option for more high school students in the U.P.

Research Questions

The following research questions frame a study of high school students' perceived challenges, adult support, and personal needs for attaining a postsecondary degree. 1) What expectations do high school students possess for college or job goals? 2) Who helps students academically? 3) What areas do students perceive as potential challenges? 4) Who are the influential people in students' lives promoting postsecondary success? 5) What are students' perceived academic needs? 6) Do gender differences exist in high

school students' perceptions of challenges, adult support, and personal needs for having PSE as a viable goal?

Theoretical Framework

The theoretical framework of the research involved with constructing the interviews and surveys relies on Social Cognitive Learning Theory, which includes the nonoccurrence of expected consequences, vicarious learning, and modeling to explain people's behaviors. Albert Bandura is the leading proponent of Social Cognitive Learning Theory. Bandura emphasized observation, modeling, vicarious reinforcement, and vicarious punishment (Boeree, 2006). Much of his theory includes learning by observing other people's behaviors within their environments. The people being watched serve as models for the observer. In my study, the observers are high school students. The people they watch are persons who support their goals after high school (i.e., college or job goals).

Breaking the cycle of low SES students *not* attending or succeeding in PSE is best understood through nonoccurrence of expected consequences, which occurs when a student does not receive a desired behavior based on her or his actions. Leon Festinger's Social Comparison Theory (1954) explains how people look to the world that surrounds them, then form and evaluate opinions and abilities, which means people typically judge each other based on the people surrounding them. Even people with upward drive have non-social restraints making movement nearly impossible (Festinger, 1954). According to Social Comparison Theory, people who live in cultures associated with multigenerational trends of not going to college should seek out similar others, and consequently, should find breaking the cycle of not going to college difficult to do.

Inversely, this theory posits that people who are around others who have succeeded in PSE should have a feeling and drive to succeed at the same level or higher level of PSE attainment.

Vicarious learning is educating through seeing and recalling a model reinforced to students (Boeree, 2006). Observing positive or negative behaviors could have a lasting impact on the outcomes of other's lives. A study completed by Kaduvettoor O'Shaughenessy, Mori, Beverly, Weatherford, and Ladany (2009) looked at the relationship of supervisors and their supervisees and how the observational learning impacted the relationships and outcomes of their productivity. Higher quality of interactions between supervisors and supervisees in a culture promoting success led to more group success. This research explores the people surrounding rural high school students, particularly teachers, counselors, and students' care-providing adults who have or have not attended and succeeded at a postsecondary institution. When students observe or are involved in a culture where postsecondary success is part of the culture, they should have higher expectations for themselves and perceive challenges to PSE success as less and supports for PSE goals as more likely.

As models, peers and parents provide high school students with information about future aspirations, perceived shortcomings, finances, job, and college information. Educational professionals need to know more about rural high school students' perceptions of their future careers, persons available to help students academically, students' perceived challenges to PSE and academic needs, and persons promoting postsecondary options for students. Having accurate information might be one possible way to improve counseling and advising students for future PSE and career preparation.

Key Terms

The following terms are used throughout this thesis.

First-generation. "Neither parent had more than a high school education" (U.S. Department of Education, 2001).

Higher Education. "An educational institution in any State that is legally authorized within such State to provide a program of education beyond secondary education" (U.S. Department of Education, 1998).

Low-income. "An individual whose family's taxable income for the preceding year did not exceed 150% of the poverty level amount" (U.S. Department of Education, 2009).

Rural area. "Population of largest place in the commuting zone/labor market area was less than 5,000 in 1990" (U.S. Department of Agriculture, 2003).

Assumptions

The qualitative and quantitative data are prepared with three assumptions. First, students answered survey and interview questions honestly and to the best of their knowledge. Second, students know demographic information about their families. Finally, the group of students participating in the research is representative of students comprising the U.P. high school student population.

Summary

Success at the postsecondary level will play a vital role in the coming decades. Future jobs are encouraging and requiring higher levels of education. In the isolated and impoverished U.P., low SES levels have become part the culture of many U.P. residents. Education could be a means of breaking the cyclical poverty that could persist. The use of

best practices by educational professionals and others in and outside of the classroom could help build a culture for future generations where postsecondary success is an option for all students, including first-generation and low-income students.

Chapter 1 introduces the topic of this thesis and includes the background of the problem, including why the research is vital to the success of future generations by making postsecondary success an option for everyone. Chapter 1 also introduces the research questions and theoretical framework driving the research. The chapter concludes with an explanation of key terms and assumptions used throughout the research and thesis. Chapter 2 reviews the educational research literature pertaining to developing postsecondary success for low SES rural communities. Information collected for Chapter 2 comes from a variety of sources, including government documents and journal articles. Chapter 3 looks at the methodology influencing the research. Chapter 4 contains the results of the research. Chapter 5 has a discussion of the research findings.

Chapter 2: Literature Review

A review of literature pertaining to a lack of postsecondary success for low SES students led me to research how to assist students in being more successful. PSE success is going to be important for the future success of students with jobs now demanding education beyond high school. The research completed in this study examines rural U.P. students and their PSE educational expectations and goals. Chapter 2 is organized into subsections including the culture of U.P. students, family capital and discrepancies between urban and rural educational attainment.

Culture of U.P. Students

A longitudinal study completed over a 10-year period showed non-first generation students had a higher than expected level of education and aspirations for education, but a decrease in expected educational outcomes. Factors responsible for the lower educational attainment were a lack of emotional encouragement and financial support from parents and lower scores on college entrance exams due to enrolling in academically less rigorous secondary schedules (Hahs-Vaughn, 2004). Students from small, rural schools typically have less access to counseling for selecting their curriculum track and planning school programs (Lee, & Ekstrom, 1987). Only 9% of all first generation students take a rigorous core curriculum in high school compared to 20% of their non-first generation peers (Wharburton, Bugarin, & Nunez, 2001). Due to the lack of high school preparation students must typically take remedial classes at the postsecondary level, which further discourages them from completing a degree (Green, 2006).

To account for the difference in postsecondary aspirations and thus attainment for first-generation students, researched developed Social Cognitive Career Theory (SCCT), which focuses on Bandura's (1986) self-efficacy, outcome expectations, and goal setting (Lent, Brown, & Hackett, 1994; Ali, & McWhirter, 2006). According to SCCT, when students' self-awareness and aspirations are increased, the likelihood of a positive outcome is greater. Consequently, when students' self-awareness and aspirations for a PSE increase, high school graduation rates also should increase.

A study completed by Gibbons and Shoffner (2004) found raising self-awareness and aspirations by impeding inaccurate beliefs and by providing first-generation students and families with otherwise difficult to access information and support was vital to postsecondary success. Assisting students and families with the college search and decision-making process, college applications, financial aid, and preparing for college life were additional means to help close the gap for first-generation students and their non-first-generation peers (Gibbons, & Shoffner, 2004). Ali and McWhirter's (2006) study of rural Appalachian students confirmed Gibbons' research. Exposure to community members with a postsecondary degree, creating programs to assist students overcome perceived challenges, and intervention techniques to bring awareness to methods of succeeding at the postsecondary level were determined to be essential for rural community students (Ali, & McWhirter, 2006).

Family Capital

Numerous challenges exist for first-generation students whose goals are postsecondary success. In particular, first-generation students living in rural poverty typically come with tangible drawbacks, including inadequate schools, physical isolation,

and poor public services (Lichter, & Johnson, 2007). These physical challenges are intertwined with resulting emotional shortcomings evident in first-generation students, including anxieties about dislocations and cultural, social, and academic transitions (Gofen, 2009). To overcome the emotional challenges, low SES students typically from first-generation families must obtain information about PSE and security in the form of capital and financial aid to use in their pursuit of a PSE degree.

Capital comes in many different forms, including financial, social, and human resources (Gofen, 2009; Parcel, & Durfur, 2001). Anat Gofen (2009) went as far as taking these different capitals and combining them into what he called family income. The idea of family capital emphasizes the context or setting in which capital resides and focuses on how families affect the future of their children (Gofen, 2009). Investment in the outcomes of children comes in forms such as paying money for tuition and pushing students to achieve more personally and academically. However, first-generation students receive less help from their parents compared to their non first-generation peers (Thayer, 2000).

The fact first-generation students receive less of their family's capital led McCarron and Inkelas (2006) to research 1803 students, of whom only 29.5% of first-generation students had obtained at least a bachelor's degree within 8 years of graduating high school. This finding is in contrast to their high school aspirations where 40.2% of first-generation high school students aspired to obtain at least a bachelor's degree. The results showed first-generation students relied on their parents more than their non-first-generation peers and had less family capital available. In addition, first-generation students were not supported in a college environment and expectations for PSE had not

been clearly articulated at the high school level (McCarron, & Inkelas, 2006). Additionally, first-generation students find difficulty in breaking the intergenerational cycle of failing to obtain a postsecondary degree. Sixty percent of first-generation high school students did not set PSE as a goal, and even when first-generation high school students had high expectations for PSE, one-quarter failed to meet their aspirations (McCarron, & Inkelas, 2006).

Rural Discrepancies

According to Robert Gibbs (2000), rural and urban schools score similarly on the National Assessment of Educational Progress standardized tests, but differ in college and career attainment. Gibbs (2000) found rural education to posses many challenges preventing postsecondary success. Challenges for rural students include low SES levels, lower wage levels, greater distance to postsecondary institutions, parents lack education beyond high school, less qualified teachers, and fewer opportunities to take advanced placement classes (Gibbs, 2000). Included within these challenges were the school districts of where the students live. A study of urban schools and districts has shown a need to redraw district and neighborhood lines to incorporate a better mix of SES people to make schools distributed more evenly. The social isolation occurring between schools could further isolate and inhibit the poorest students from receiving an equal opportunity for a high quality education (Hochschild, 2003). Overall, high school students living in rurally isolated areas are at an educational disadvantage, when compared to their urban peers (Lichter et al., 2007).

The differences between rural students and their urban peers not only exist in the form of access to higher quality schools and education, but also for exposure to research

completed to assist educational professionals in closing the gap. Alan Deyoung (1987) completed a review of literature showing the discrepancy in urban to rural research. Over 20 years ago, rural schools were closing the gap with new government funding shifted towards closing the gap. This 20-year-old problem still exists today. Approximately one-fifth of the 35 million poorer people in the U.S. live in rural areas, yet policy and research continue to ignore these areas (Weber, Jensen, Miller, Mosley, & Fischer, 2005). In researching literature for this thesis, no research could be found about educational policy based specifically on the rural U.P.

Summary

As determined by the research literature, more research should be completed on rural youth to identify the needs of rural youth and close the educational gap (Weber et al., 2005). Identifying the best practices from the student's view is a necessary step and one of the goals of this research.

Chapter 3 focuses on survey and interview methodology used to collect data on the U.P. youths' perceptions their support for obtaining the grades they achieve and their educational expectations, perceived challenges, and persons in their lives who promote PSE.

Chapter 3: Methodology

The purpose of the quantitative and qualitative research conducted in this research was to uncover information on perceived postsecondary challenges and aids for rural, first-generation students in the rural U.P. of Michigan. Chapter 3 includes the research methodology, participants, procedure, cooperating instructor directions, data analysis, and a summary.

Research Methodology

A mixture of quantitative and qualitative research was necessary in this research to achieve an understanding of rural high school students' perceptions of challenges, adult support, and personal needs for having PSE as a viable goal. Using quantitative methodology was appropriate in this research because a large amount of data could be collected over a range of locations. The results were examined for trends and correlations. Qualitative methodology in the form of interviews was used as a way to enrich and expand the understanding of the survey results. The interviewees also completed surveys, which serve as a within subjects comparison and means of generalizing interviews with the larger pool of surveys.

The goal of this research was to uncover areas to assist rural high school students in how to resolve perceived challenges, personal needs, and support family contributions to set PSE as a goal for the underrepresented population in the U.P.

Participants

During spring of 2009, rural high school students completed 265 surveys at seven sites (6 high schools and 1 TRIO Upward Bound program) in the U.P. Participating students ranged in age between 14 and 21 years. The follow-up interview process began in February 2010 with 21 students, who completed both the survey and interview. The person administering the surveys and conducting the interviews was the investigator.

Survey

The survey consisted of 12 items and the topics included future plans, educational goal, who helps academically, perceived challenges to PSE, family education, required assistance, skipping tendencies, and demographic information. A Likert scale was used for the question on required assistance. Students could choose from none, moderate, average, above average, or a lot of assistance required in each of the following categories: testing, studying, financial aid, college applications, finding a college, tutoring, managing time and money, using a computer, writing and math skills, and picking a major. The term "barriers" is the term used throughout this thesis because "barriers" is the term used in the educational literature. The term "obstacles" was the term used in the students' survey because "obstacles" was a term easily understood by high school-aged students. Participation in the survey was contingent upon completing a parent permission form and signing consent letter. Students' participation was voluntary, was not part of a requirement of any class, and did not affect students' grades.

Interview

The interviews consisted of 16 items and the following topics: future plans, skills, what students are doing to prepare for their future, perceived challenges to attending PSE

or finding a job, knowledge of financial aid or obtaining a loan, who talks about future plans, family education, demographic information, and how education professionals could support students more. Participants described their future plans, and skills required to achieve their plans in open-ended questions. They discussed their knowledge of financial aid and college admissions or finding a loan and applying for a job if they had no plans of attending PSE. All interviewees answered questions about who helps them achieve academically and who talks to them about PSE. They elaborated on who talks to them about PSE, who has a 4-year degree, and demographic information including their free or reduced hot lunch status and tendencies to skip school. All questions allowed students to give feedback on how educational professionals could better support students for their chosen futures. Participation in the interview was contingent upon completing a parent permission form and signing consent letter. Students' participation was voluntary, was not part of a class, and did affect students' grades.

Procedure

To conduct the quantitative research, letters and/or emails were first sent to all 59 U.P. high school principals and/or superintendents and three TRIO-Upward Bound directors requesting permission to conduct research in their schools and programs. Six high schools and one Upward Bound program responded in the affirmative for conducting research. After obtaining permission to conduct research in the high schools and program, the investigator spoke with participating schools and program personnel to plan for contacting school personnel to distribute surveys across all grade levels. The students were a sample of convenience, as participants were from schools where the administration allowed the research to be conducted in their school or program.

In February 2010, parent permission slips were sent to 75 potential participants under the age of 18 years in an Upward Bound program. The program encompasses nine high schools, three alternative schools, and a variety of students. Twenty-one students returned permission slips, then read and signed a participant informed consent letters, which explained the purpose and potential risks of completing the survey and interview. (See Appendix E) Participants completed the survey in an isolated area and the interview, if given, followed immediately after completion of the survey. The investigator conducted interviews in an isolated area in the participant's school.

Northern Michigan University's Institutional Review Board (IRB) approved this research through full committee review. The research permission number is #HS09-250. Materials used in this research were a writing utensil and survey and/or interview questions. The researcher is the Assistant Director of an Upward Bound program and is a certified secondary business and social studies teacher.

Cooperating Instructor Directions

In each of the high schools, the investigator met with cooperating teachers per the principal's permission. Each teacher had access to all grade levels in each cooperating school. Typically, cooperating teachers were in the English departments of the schools. Cooperating teachers were instructed on the rationale for the research and were given directions for distributing the parental permission slips. Surveys were administered by the instructor. Only students who returned parental permission slips or who were 18 years of age or older completed the surveys. Students completed surveys in class while others completed independent reading. In the TRIO-Upward Bound program, the investigator

distributed parent permission slips and administered surveys to participants personally in after-school study labs.

Data Analysis

Participants' names were not used in any data collection. Answers were coded and compiled in an Excel database. The qualitative research was first assigned a code by the researcher to avoid any chance of identifying participants. Data were analyzed by parents' education level and gender. The data were split by median age to examine variations in PSE goals by age. Inter-rater reliability was established for the survey coding by the researcher and an independent adult lab assistant. The inter-rater reliability for the research resulted in an alpha of 1.0. The Chi-square analysis was conducted using Statistical Package for Social Sciences (SPSS). Students who did not respond to gender and parents' education level were omitted from the analysis leaving N=261.

In the survey, students were given 15 alternatives to choose from regarding potential challenges they perceived as hindering achievement of their educational goals. Students indicated as many of the 15 alternatives as was applicable to their current situation. The responses were then totaled to find which perceived challenges participants most often indicated.

Summary

Completing research on U.P. students is a challenge, given how isolated the students are in the U.P. Results of the research were divided between age, gender, and parents' grade level. Chapter 3 explained the research methods used to conduct this study. Chapter 4 will present the results of the research.

Chapter 4: Results

The previous chapter had a general overview of the result methodologies. Chapter 4 presents the research results of the surveys and interviews, including descriptive statistics of participants' gender, age, and parents' educational level statistically analyzed. First-generation students were compared with non first-generation peers and both groups were examined for perceived challenges, anticipated support needed, and best practice techniques leading to postsecondary success. This chapter is broken down into four subsections including an overview of participants' needs, parent education level of participants, differences in students based on gender, and age. Discussion follows in the Chapter 5.

Survey Descriptive Statistics

Tables 2 and 3 are the demographic information of participants in the quantitative and qualitative research. Two of the 265 respondents did not disclose demographic information. Therefore, they were not used in compiling the data in Tables 2 and 3.

Table 2.

Demographic Information of Quantitative Research (n=265)

Location	*N*	M/F	Ave. Grade	Ave. Age[a]	Hot Lunch %[b]
CCISD[c]	13	7/6	11.17	17.85	46.43%
Calumet	108	43/63	10.75	16.40	50.32%
Dollar Bay	17	6/11	11.18	17.06	44.33%
Finlandia UB[d]	23	10/13	10.35	16.13	70.00%[e]
Jeffers	49	22/26	10.83	16.54	57.14%
Lake Linden	26	9/16	10.04	15.54	41.25%
Marquette Alt.[f]	29	12/17	11.35	17.46	55.56%
Total/Average	265	109/154[g]	10.77[g]	16.53	52.15%[g]

Note. N = number of students, M/F is Males and Females, Avg. Grade Level and Avg. Age are averages of participants from represented schools and Upward Bound Program. [a]Participant ages ranged from 14 to 21. [b]2008 free/reduced hot lunch levels from the State of Michigan Center for Educational Performance and Information website. [c]Copper Country Learning Center. [d]Finlandia University's Upward Bound program. [e]At the time of reporting (June 6th, 2009) 49 of 70 students qualified for free/reduced hot lunch in their respective high schools. [f]Marquette Alternative School. [g]2008 Free/Reduced Hot Lunch level for all U.P. schools is 36.3%

Table 3.

Demographic Information of Qualitative Participants (n=21)

Location	M/F	Average Grade	Average Age	Hot Lunch
Finlandia UB	8/13	10.67	16.38	61.90%

Note. M/F is Males and Females, Average Grade, and Average Age are averages of participants from the Finlandia University's Upward Bound Program.

Perceived Challenges.

Not enough financial aid was the top challenge chosen by 110 out of 265 (42%) total respondents, followed by difficulty of college classes (107 of 265 or 40%), finding a job (81 of 265 or 31%), lack of motivation (67 of 265 or 25%), and high school grades (58 of 265 or 22%).

Assistance Required.

The greatest amount of need was based on combined responses of above average and a lot of assistance required. The 265 students indicated the greatest amount of need was obtaining access to information related to applying to college. For example, 198 of 265 (76%) respondents indicated needing assistance in searching for financial aid, 155 of 265 (59%) respondents needed help completing a college application, and 115 of 265 (53%) indicated needing help picking a major. One interviewee responded to the question regarding how teachers and/or counselors could better prepare you for your given future by saying, "Talk more about college and help prepare me more for it". Another participant responded to the same question, "Talk more about experiences after (high) school".

Assistance Received.

Students were asked, “Who helps you to achieve the grades you receive in school?” on the survey. Eleven options were given for the student to indicate the alternatives they felt were applicable to their situation. All 265 participants answered this question. The number of responses per survey was combined to find the average number of people helping students is 2.3. Participants selected teachers as helping most (115 of 265 or 67%), peers were second (139 of 265 or 52%), and parents were third (115 of 165 or 43%). Students also had the option of choosing “No one”. This response was indicated 61 times or 23% of the 265 respondents.

Parent Education Levels

Results of the survey research showed 118 of the 265 (45%) participants were first-generation students with neither of their parents completing a 4-year degree. Participants reported in the quantitative research, 72 (27%) mothers and 85 (32%) fathers had obtained a 4-year degree, with 44 of the 265 (17%) having both parents with a 4-year degree. Of the 265 participants, 192 (72%) lived in a house where no more than one person possessed a 4-year degree, and this person was not necessarily a parent.

The interview research varied from the survey research. Seven of the 21 (33.3%) participants reported having at least one family member with a 4-year degree, but only four of 21 (19%) responded that one of these people was a parent. All students who responded having a parent with a 4-year degree attributed those degrees to mothers and no fathers.

Education Expectations.

Students in homes where parents have obtained a four-year degree tend to aspire for a higher level of postsecondary education. First-generation students want four years of education more when compared to their non first-generation peers, although the 8.5% difference was not statistically significant. The percentages in Table 4 were calculated by comparing the number of respondents setting goals for each level of education and comparing that to the number of participants responding to the in each degree type.

Table 4.

Educational Goals Based on Parents' Education Level (n = 265)

	First Generation (*N* = 150)	Non First-Gen (*N* = 112)
High School Diploma	3.6%	8.7%
Certificate	1.8%	2.7%
Associate (2-yr degree)	14.3%	18.0%
Bachelor (4-yr degree)	59.8%	51.3%
Masters or above	18.8%	16.0%
Did Not Respond	1.8%	3.3%

Assistance Received.

In an overall comparison of first generation and non first-generation students to an average number of people who assist in achieving their educational goals the results are similar. Students were given 11 assistance options from family members, educational professionals, or other assistance services and could choose as many as was applicable to their situation. The number of people or groups the student indicated were then averaged. The average number of people assisting students from the quantitative study is 2.3 for

first-generation and 2.4 for non first-generation students. Based on the interviews, first-generation students were assisted by 2.6 people, while non first-generation students reported 2.8 people assisting them. During an interview, one student commented on how important his family was to his educational success, “My family has faith in my abilities.”

The interview question, “Does anyone in your family have a 4-year degree,” was followed by “Does a (family member(s)) talk to you about going to college? If so, what do you talk about?” This question does not mean the family member has to be a parent, so they are still by definition first-generation. Nine (42.9%) of 21 participants said yes, while 12 (57.1%) of 21 reported not having anyone in their family with a 4-year degree talk to them about education. Eight of the nine participants (three first-generation and six non first-generation) agreed the family member(s) talk to them about college. The one outlying student said his family does not talk to his brother with a 4-year degree, so he is “not allowed to either”. Each of the other eight “yes” responses agreed the person or people with a 4-year degree talked to them about education. One non first-generation respondent talked about how his mom and step-dad talk to him about “transportation, saving money, and strategies.” When asked if the communications helped, the student said, “Absolutely! This makes me think about my future (and) helps me plan”. One first-generation respondent has a sister who has a 4-year degree and talked about the fact her sister talks “about where to go (and) how to pay for it (college).” When asked if this helps, she replied, “Yes, she has been to college and knows what to expect.”

Required Assistance.

In Table 5, students residing in first-generation homes showed a tendency to require more assistance in all areas, but especially the key PSE access obligations of completing applications and finding financial aid to pay for their education. On the survey, students indicated the challenges they perceived in obtaining their educational goals. In examining the average number of potential challenges perceived, students had 15 options to choose from, including an open area to indicate an alternative not listed. First-generation students reported 2.2 challenges, while non first-generation students perceived 2.0 challenges in the quantitative research. In contrast, the qualitative interview found first-generation students reported 2.6 challenges, while their 150 non first-generation peers reported 1.0 perceived challenge. Taking the number of people who assisted students and dividing by the total number of people in each sub-group was how the averages were calculated. The greatest variation in perceived challenges came from financial aid where 75 of 150 (50%) of first-generation and 33 of 112 (29%) of their non first-generation peers indicated this challenge to hinder them from achieving their educational goals. This difference was also found to be significantly different (χ^2 (1, N = 261) = 11.48, p = .001).

Table 5.

Most Assistance Required Based on Parent Education Level (n = 262)

Type of Assistance Required	First Generation (*N* = 150)	Non First-Generation (*N* = 112)
Searching for financial aid	39.3%	25.0%
Managing money	24.7%	19.6%
Learning how to do math	26.0%	17.0%
Picking a major	23.3%	16.1%
Learning how to study	22.7%	12.5%
Managing time	23.3%	11.6%
Completing college applications	23.3%	8.9%

Note. This table presents the percentage of respondents requiring "above average" or "a lot" of assistance in rank order of frequency, as reported on the surveys.

Skipping.

Those students who reside in first-generation homes showed a tendency to skip school more often than their non first-generation peers did. The difference between the groups was not statistically significant. Self-reporting from students in the quantitative research resulted in 61 of 150 (40.7%) of first-generation students said they skipped school at least once during the 2008-2009 school year, while 37 of 112 (33.0%) of their non first-generation peers confirmed skipping school during the same time period.

Gender and Educational Level

Similar to the comparison based on parents' educational attainment, the student responses based on gender are quite pronounced. Based on the 154 female respondents and 111 male respondents, the average reported age of females was 16.4 years and the

average reported age of males was 16.6 years. Likewise, current educational levels of females (10.8 years) and males (10.7 years) were similar.

Educational Expectations.

One aspect on which male and female participants differed was having a perception of what job they would like to do in the future. The interviewer asked, "Do you know what job or career you would like to have someday?" A yes or no answer and a space to fill in a potential career were available for affirmative answers. Sixty-nine out of 111 (62.2%) males knew what they wanted to do one day, while 116 out of 154 (75.3%) of females knew what they wanted to do. A statistically significant more amount of females know what they wanted to do (χ^2 (1, N = 261) = 6.31, p = .012) when compared to their male peers.

Students were asked if they expected to move on to a PSE with a yes or no response. The results of this question were found to be statistically significant as more females than males wanted a PSE (χ^2 (1, N = 261) = 5.66, p = .017).

In Table 6, the educational expectations of males and females are shown by averaging the total number of respondents to the total number of males or females for each of the five levels of educational expectations. Gender differences in levels of degree attainment were not statistically significant.

Table 6.

Educational Goals Based on Gender (n = 265)

	Males (*N* = 111)	Females (*N* = 154)
High School Diploma	7.2%	5.8%
Certificate	3.6%	1.3%
Associate (2-yr degree)	17.1%	16.9%
Bachelor (4-yr degree)	55.0%	53.9%
Masters or above	12.6%	20.8%
Did Not Respond	4.5	1.3%

Assistance Received.

The average number of people who help students achieve their educational goals differs across the genders. Females reported an average of 2.4 different people assisting of the 154 respondents, while males report an average of 2.1 for the 111 participants. Both groups listed teachers as assisting them most frequently males 44 of 111 or 64% and females 70 of 154 or 70%. Peers were the second largest group from which high school students received help with PSE information (males 50 of 111 or 45% and females 90 of 154 or 58%), and parents were a third group (males 44 of 111 or 40% and females 70 of 154 or 45%).

On the opposite end of the spectrum, counselors were listed as helping students achieve their educational goals 8 out of 111 (7%) by males and 7 out of 154 (5%) by females in the quantitative research. The interview contradicted the survey results. Males

reported 2 out of 8 (25%) times, while females responded 4 out of 13 (31%) times that the counselor helped them with their future plans.

An interviewee talked about teachers being the most influential in her attending PSE. She said the amount of help depends on the teacher, "When a teacher knows you and what you want to do, they are much more helpful than others who don't." Thirty-four of 111 (31%) males responded no one helped them and 33 of 154 (21%) females responded no one helped them. One interviewee said no one helps at him at home, because "…that is the job of professionals, like counselors."

Perceived Challenges.

One area males and females do not differ greatly is the number of perceived challenges. Both males and females reported an average of 2.1 challenges. The difference occurred when comparing the types of challenges reported. Females indicated statistically significant perceptions of college courses being too difficult (χ^2 (1, N = 261) = 6.93, p = .008) and a concern about homesickness (χ^2 (1, N = 261) = 4.55, p = .033) as challenges to PSE in comparison to their male peers. On the other hand, males reported a statistically significant lack of motivation (χ^2 (1, N = 261) = 21.26, p = .001) and concern about high school grades (χ^2 (1, N = 261) = 4.08, p = .043) as challenges to PSE. Financial aid percentages differed by 11% (males 35.1% to females 46.1%) between the genders, but did not reach statistical significance.

Assistance Required.

Table 7 shows the percentage of respondents with "above average" and "a lot" of assistance, Table 8 shows the percentage of respondents with "moderate" and "average"

assistance and Table 9 shows the percentage of respondents answering "none" to the amount of assistance required. In comparing the percentage of male and female responses to areas requiring assistance, the percentages are shown in rank order based on frequency.

Table 7.

Assistance Required Based on Gender (n=265)

Type of Assistance Required	Males (*N*=111)	Females (*N*=154)
Searching for financial aid	28.8%	38.0%
Learning how to do math	23.4%	22.1%
Managing money	19.8%	24.0%
Picking a major	24.3%	17.5%
Learning how to study[a]	25.2%	14.3%
Managing time[a]	25.2%	14.3%
Completing College Applications	18.9%	16.9%

Note. [a]Two types of assistance required tied in frequency.

Table 8.

Moderate and Average Required Assistance Based on Gender (n=265)

Type of Assistance Required	Males (*N*=111)	Females (*N*=154)
Completing college applications	59.5%	66.2%
Finding a college	55.9%	61.7%
Searching for financial aid	62.2%	54.6%
Picking a major	55.0%	57.1%
Learning how to study	50.5%	60.4%
Managing money	55.9%	51.3%

Table 9.

Areas Students Require No Assistance In Based on Gender (n=265)

Type of Assistance Required	Males (*N*=111*)*	Females (*N*=154)
Using a computer	46.0%	58.4%
Learning how to write	46.0%	55.2%
Tutoring/Mentoring	36.9%	41.6%
Learning how to take tests	36.9%	39.0%
Learning how to do math	33.3%	30.5%
Finding a college	30.6%	25.3%

Skipping.

The skipping habits of males and females did not differ a lot between the two groups. Of the 154 female respondents 55 (35.7%) indicated they skipped at least once during the 2008-2009 school year. In the same time frame, 44 of the 111 (39.6%) of the male participants reported skipping school. The difference in skipping behaviors between genders did not reach statistical significance.

Participant Analysis Based on Age

The median was used to divide the group of participants in half by age. First, all students were organized based on age. The median was found to be 17 years of age. The 17-year-olds were split in half to determine the younger and older students (younger=151 and older=112). Two participants did not indicate their age, thus could not be included in the split. Results based on the analysis of students based on age are as follows.

Educational Expectations.

Table 10 depicts the older group of students had a better idea about what career they would like to have in their future than their younger peers. Of the 112 participants in the older group, 86 (75.4%) of the respondents claimed to know what career they would like to have one day. In contrast, only 96 (63.6%) of the 151 participants in the younger group claimed to have an idea about what they would like for their future career.

Table 10.

Educational Expectations Based on Age (n = 263)

	Younger (*N* = 151)	Older (*N* = 112)
High School Diploma	3.3%	10.7%
Certificate	0%	4.5%
Associate (2-yr degree)	16.6%	17.0%
Bachelor (4-yr degree)	57.0%	51.8%
Masters or above	19.9%	14.3%
Did Not Respond	3.3%	1.8%

Assistance Required.

The averages used in Table 11 were calculated by taking the total number of respondents in each of the five Likert scales compared to the total number of participants across age groups. In comparing the percentage of younger and older group responses to areas needing above average or a lot of assistance, the two age groups agreed on areas they required more assistance.

Table 11.

Students Requiring Assistance by Age (n = 253)

Type of Assistance Required	Younger Group (*N* = 151)	Older Group (*N* = 112)
Searching for financial aid	33.1%	34.8%
Learning how to study	19.2%	18.8%
Time management	16.6%	22.3%
Managing money	21.9%	23.2%
Picking a major	20.5%	20.5%
Learning how to do math	19.9%	26.8%
Completing college applications	15.9%	20.5%

Note. This table presents the percentage of respondents requiring "above average" or "a lot "of assistance in rank order of frequency, as reported on surveys

Assistance Received.

In comparing who assists the younger and older groups in achieving their educational goals, very little difference exists between groups. No more than a 5% difference in any subgroups exists, except the younger group listed peers as a source of assistance 90 out of 151 respondents (60%), while the older group chose peers 50 out of 112 participants (45%). In both groups, teachers were listed the most often when comparing the younger group (102 out of 151 or 68%) to the older group (74 out of 112 or 66%). Counselors were reported to have assisted 8 out of 151 (7%) by the younger group and 5 out of 112 (3%) by the older group. In the younger group, 39 of the 151

(26%) participants and 28 of the 112 (25%) older group participants report “no one” helps them achieve their educational goals.

Skipping.

Students in the older group reported skipping school at a higher rate than their younger peers did. Out of the 112 participants in the older group, 61 (53.5%) reported skipping school during the 2008-2009 school year, which is in contrast to the younger group of 151 participants and 38 (25.2%) students confirming they had skipped school. A senior during the interviews talked about skipping because there was “no educational value in going that day”.

Degree Aspirations.

Some students during the interviews did not know what a bachelor’s degree or a 4-year degree was. Some students said people went for four years and did not graduate, but a lot of confusion was taken from these questions. An example came from a young woman who was asked to talk about her family’s education. She responded by saying her mother went to college. The follow up question asked if the mother graduated with a bachelor’s degree, and the interviewee said, “I don’t know what that is.” The response was a four-year-degree, but the student simply talked about the fact her mother went to school for four years, but she did not know what degree she obtained if any. Another follow up question was “Does she talk to you about education or college?” Again, the young woman responded with “No, she just tells me I have to do well in school so I can go to college,” but based on the conversation the mother did not talk to her daughter about her own experience in PSE.

Summary

This section examined how participants' parents' educational level, gender, and then age influenced perceptions of challenges, supports, and efforts needed for postsecondary success. First-generation students reported more perceived challenges, required more assistance searching for financial aid, and had a tendency to skip more than their non first-generation peers did. Males appear less motivated to seek postsecondary options, as shown by fewer masters' degrees as goals, less clarity about their future goals, and more responses of "no one" helped them achieve their grades when compared to females. Older students desired fewer bachelors' and masters' degrees, reported fewer peers as a source of assistance, and skipped more than their younger peers did.

Chapter 5: Discussion and Conclusion

The US has made great strides in postsecondary success having record number of students attending postsecondary institutions, as referenced in Table 1. Life chances for success might depend heavily on attaining higher education degrees, but student background is as important as ever for who attends PSE and who completes PSE (Hochschild, 2003). Rural students face many challenges in not only attending postsecondary education, but also succeeding when they arrive at college. The result of this research will provide educational professionals at the secondary and postsecondary levels with information to enhance the likelihood of students setting PSE goals by looking through the students' eyes for understanding the challenges, adult support or not, and personal needs for having postsecondary education as a viable goal.

Participants

No matter how the data was organized, students continuously had high educational expectations. However, support for Bandura's (1986) Social Cognitive Learning Theory and Festinger's Social Comparison Theory (1954) was confirmed by the fact non-first generation students have higher educational expectations then their first-generation peers, which is a call for professional K-12 educators to create opportunities for high school students to use social comparison groups of peers who want to go to college. Students living in a culture of PSE success do have higher PSE goals than students who would be first-generation college attendees have. Since older high school students have lower educational expectations and skip school more, professional

educators could use Social Cognitive Learning Theory (1986) and Social Comparison Theory (1954) to increase motivation of older high school students to maintain consistently high PSE goals and expectations throughout high school.

Females have significantly higher educational expectations than their male peers do (Table 6) and younger and older students strive in relatively similar numbers for higher PSE degrees (Table 10). The unfortunate reality for youth from rural areas is educational expectations do not always translate into postsecondary success (McCarron, & Inkelas, 2006), particularly in rural areas like the U.P. where rural isolation is evident from being surrounded by lakes and a low population density. First generation students have difficulty breaking the intergenerational cycle of not obtaining a postsecondary degree (McCarron, & Inkelas, 2006).

Students need extra attention and support from educational professionals and outside school programs to break the intergenerational trends, because they have less family capital to help achieve success at the postsecondary level. As shown in the interviews, having a family member achieve a PSE degree does not mean the family member will talk with the student about PSE. Overwhelmingly, students said teachers were the most influential in their goals for PSE, while counselors were lost in the mix according to survey participants. The lack of counselor support could be why students have such a high need for additional information on key college application documents. Students in small schools might have counselors doubling as teachers, but this explanation does not explain the discrepancy in answers between the quantitative and qualitative research finding counselors' assistant vastly different. How effective counselors are in assisting students' PSE goals is an opportunity for future research.

According to this research, the effectiveness of counselors is still in question. Of students completing the survey, only 13 out of 263 (4.9%) responded that their counselor assists them educationally. Students may have misinterpreted this question, thereby skewing the data because many rural U.P. counselors double as teachers, but the counselor remains the point of contact between postsecondary institutions and secondary schools. A disconnection in this point of contact could lead to a breakdown in students' understanding of the process of applying to postsecondary institutions.

The research also shows students appear to need help with setting goals for their futures. The key college access obligations like finding financial aid, completing college applications, and choosing a major are required by students to ensure their success. For all groups, help finding financial aid is widely sought after information and a perceived challenge to PSE, completing college applications and choosing a major followed, but varied in how important each is to different subgroups of students.

One surprise in the data was students expressing a desire to learn more about managing money. Living in the U.P. where unemployment rates are typically higher than the national average, having high school students concerned about managing money is a refreshing sign, but a topic parents and educational professionals need to address. Another perceived challenge was not finding a job as a challenge to achieving PSE goals. Students also expressed an interest in learning to do math and learning how to study as key skills for achieving PSE success.

Parents

Whether the message comes from counselors, teachers, or other sources, rural high school students requested similar information to help them access PSE goals. The

comparison of first-generation to non-first generation students showed the latter group expected to obtain a higher percentage of bachelors and masters degrees. Two approaches to help parents bridge the gap for their first-generation children are to have people with a 4-year degree talk to parents or for parents to enroll their children in programs that focus on exposing students to people with degrees in PSE. Individuals, who have been to PSE and succeeded, understand the nuances and culture of how to be successful when leaving high school. The experience is something a first-generation parent usually cannot offer their child, which was evident in the interviews of students who lived with people with 4-year degrees and who talked about PSE. Talking helped to frame an idea about what college will be like.

One surprising finding in the quantitative research was fewer mothers (27%) have 4-year degrees than fathers have (32%). In the US since 1978, more females have been enrolled in PSE than males, and in 2001, women received 180,000 more bachelor's degrees than men did (Mortensen, 2003). The qualitative research sample aligned with Mortensen's findings of the first-generation families having more mothers with 4-year degrees than fathers.

Educational Professionals

As stated earlier, teachers were seen as having the greatest influence on students' grades above all other groups or individuals. Students skipping school was largely attributed to students being bored or viewing the information as not being relevant to the students (Yazzie-Mintz, 2007). An interviewee who said he skipped school because he saw "no educational value in going that day" confirmed Yazzie-Mintz's (2007) interpretation of why students skip. The data also show first-generation students skip

more often than non first-generation peers, males skip more than females, and older students skip more than their younger peers do, but all groups skip school. Parents and educational professionals could help students see school is relevant to them and talk of the importance of staying in school to obtain their education. Educational professionals cannot help students with the knowledge they require if students are not present to learn. Helping students stay in school one way educational professionals and students can change the culture of the U.P. and make postsecondary success an option for everyone.

The issue of motivating students is an issue specifically in the male populations of the schools researched. Almost triple the number of males (39.6%) compared to females (14.9%) viewed a lack motivation as a greater challenge to PSE then financial aid. Lack of motivation was higher than any other perceived challenge for males. Needing assistance with time management tied for second highest challenge among males. Searching for financial aid for males was third, as shown in Table 6.

Females have higher expectations for education than their male peers do, as shown in Table 5. Females also view difficulty of college classes and not having enough financial aid as challenges to PSE. Female students responded to needing above average or a lot of assistance finding financial aid (38.0%) compared to only 28.8% of their male peers. Females also saw not enough financial aid as a challenge to PSE 46.1% of the time, while males responded the same 35.1% of the time.

To help students motivate intrinsically about education, education professionals should look at what students view as important to their educational goals. First-generation students tend to need more assistance in all of the categories when compared to their non first-generation peers (Table 4). Although both first-generation and non first-

generation students agreed on activities they anticipated needing assistance in, they vary on how much assistance they required. An example comes from completing a college application with 14% more first-generation students needing above average or a lot of assistance with this task more than their non first-generation peers need.

The real question is whether first-generation students would find persons to help them, given the 23% of 265 persons reporting "no one" helped them academically. The place to begin helping students establish postsecondary goals should be to provide support for students' perceived challenges and provide persons to help with finding financial aid, learning how to do math, study more effectively, manage money more effectively, and lastly choosing a major in college. Only when secondary educators and counselors can make these changes will postsecondary options become a reality for everyone.

Strengths and Weaknesses of Study

Many strengths and weaknesses became apparent throughout this research. One problem was omitting a question regarding free and/or reduced hot lunch on the survey. The free and/or reduced hot lunch averages were taken from the 2008 school year statistics, but the omission was a weakness in the research, although the 2008 school year statistics would still act as a check against socially desirability bias (i.e., socially desired responding). Another weakness was not being able to use blanket consent with the students to encourage more participation. The system used in this research asked students to remember to bring a permission slip home, then bring the signed slip back to school, and lastly give the permission slip to the teacher within a reasonable amount of time.

Without incentivizing the process in some way, some students had no motivation to bring the signed permission slip back to school or to take part in the survey and interviews.

A wonderful amount of cooperation and interest in the research was apparent in the teachers and administrators who allowed access to their schools and classrooms for data collection. Educational professionals are extremely busy people, but they were more than willing to help in every way possible. The research would not have been as successful without such wonderful support of participating teachers and administration.

A strength of this research was the large sample size. Having 265 participants from seven sites was a great turnout, but they could have been more spread out across the U.P., as seen in Appendix G. Starting so late in the school year made some administrators weary of disrupting classes before the end of the year, right after testing, and before spring break. School administrators were intrigued by the research, but were hesitant to give the surveys or allow the interviews late in the school year.

Limitations

Starting at the beginning or middle of the year would have been better than around the spring break time for schools. Administrators would have been more receptive to these times of year, but due to time constraints, this option was not viable for the study.

Before students start thinking about applying to college as juniors or seniors, having teachers ask students a blanket question about how much assistance students need is not a fair question. Students probably have never seen a college application. The same is true for younger students in finding financial aid, searching for colleges, and picking a major. These questions might be good for them to think about, and students should be encouraged to begin thinking about important choices, but not many first or non first-

generation students would have done so, unless prompted by an outside source. When completing the surveys, students did not have the opportunity to ask questions, so they may have been confused by these questions.

Suggested Changes

The research calls for a more in-depth understanding of what counselors are doing to help guide students into setting their chosen career goals. The question asking, "Who helps you achieve the grades you receive?" needs to be explored in more depth. In a future research study, a question should be added, "Who helps you achieve your future goals?" "Do your future goals include education beyond high school?" These questions would take into account persons not planning to attend PSE and would examine goals, not grades. Asking students about grades might lead them away from indicating a counselor as a source of support. A section on parents and care providers on how much academic support each gives would also be helpful, as well as knowing if they truly have a four-year degree. Furthermore, including items on having students identify a bachelor's degree, associate's degree, and master's degree might have yielded interesting information. A more precise Likert scale may help students as well. Asking students the difference between moderate and average might have caused confusion. In my next study, I would use none, a little, average, above average, and a lot to produce more easily interpreted results.

Future Research

Using a sample of convenience is a good start and based on the 2008 free and reduced lunch statistics (seen in Table 2), my survey sample was a representative group of rural U.P. students. Creating a larger range of schools and people would create a more

representative sample of students. My next study would include a longitudinal study of how effective various approaches are to helping students of intergenerational low SES choose PSE as an option. Implementing students' suggested changes and seeing if these changes were effective might help with motivational issues and close the gaps between first-generation and non first-generation students.

Another topic of research that came from the results was studying if students' perceptions of how to access PSE align with the requirements institutions require. For example, Northern Michigan University requires an American College Testing Program (ACT) score of 19 to gain acceptance. This means according to a report from ACT (2010) 40% of students scored below this nominal score. Females view college courses as too difficult may be justified, but this does not answer what is viewed as difficult. Researching these topics may quell the anxieties attached to attending and succeeding in PSE, thus encouraging more female high school students to set PSE goals.

Summary

This chapter looked at the important findings relating to how all individuals and groups can make postsecondary success an option for all students in the U.P. Teachers and other educational professionals, parents, and peers were the top three groups who helped students achieve their grades and set educational goals based on the data compiled in this research. Relationships between students' PSE goals, perceived skills required, and assistance needed to achieve their goals (Tables 7, 8, and 9) was enlightening. These relationships should help educational professionals inform parents of areas needing support and assisting students in maintaining the high expectations for PSE they have set for themselves. The research also shows students coming from cultures of success

develop future success, which supports the Social Cognitive Career Theory. The culture of success is seen in the fact students coming from non first-generation homes have higher educational expectations, have more people to help them academically, require less assistance, and have fewer perceived challenges to PSE than their first-generation peers do.

The purpose of this study was to examine how to make postsecondary success an option for all students from the rural U.P. Using Bandura's (1986) Social Cognitive Theory as a framework; this research examined the U.P. and the disparities of access to PSE goals, information, and degrees plaguing people living in rural areas. High school students from seven different sites completed 265 surveys. Twenty-one participants completed interviews and surveys. The purpose of the study was to find out if students had high expectations for PSE and to learn what factors students view as imperative to making postsecondary success an option. These factors included persons who helped students achieve their educational success and persons who promoted postsecondary education. If students had persons helping them set PSE goals, the research also explored in what ways these persons were doing so. The research gives educational professionals information into what students view as important in their education and what is necessary to make PSE a part of the culture, not a pipedream.

Many results of the research were found to be statistically significant. Examples include males view high school grades and motivation as challenges to PSE, while females perceived the difficulty of college classes and homesickness the same. First-generation students perceive not having enough financial aid as a challenge to PSE. Although financial aid was not viewed as being statistically significant for either gender,

91.0% of males and 92.6% of females responded affirmatively to requiring at least some assistance searching for financial aid. No statistically significant differences existed in comparing the genders or first-generation and non first-generation students in regards to skipping. The data shows many opportunities for educational professionals to help make messages sent to students pertinent and continue to motivate students to alter the culture where PSE is not an option.

Previous research has shown rural areas are weighed down by the hardships of isolation, poor preparation for PSE, less family capital, and having to break through these intergenerational cycles to succeed in today's society. This research has revealed the areas students require assistance in and what challenges they perceive to attaining their educational goals. The responsibility of parents and educational professionals is to support students' goals and give students the tools to overcome perceived challenges. Education professionals help and encourage students, but maybe changing the message education professionals send to students is a place to start. One first step would be to encourage people and groups at all levels to talk about PSE and make expectations for success at the postsecondary level part of an on-going dialogue and culture of education. These discussions should happen in schools, at home, in the counselor's office, and in students' daily lives.

Typical questions could include what do you plan to do in the future, what are the goals you see stopping you from achieving that goal, how are you going about overcoming that challenge, and lastly, how can I help you overcome that challenge. The research has shown students understand perceived challenges, but they are not always able to overcome those challenges, which is where the culture of low PSE goals is

started. Bandura's (1986) theory is the heart of changing the culture of the U.P. and offers a way for students to achieve PSE goals by finding someone who can model postsecondary success.

Students have high educational aspirations. Parents and educational professionals need to hold students accountable to their goals by making education relevant. Students should be supported to envision what success at the postsecondary level would look like and students should have a realistic idea of how much effort success in PSE would require. Educational professionals must support areas students perceive as essential to their success, such as finding financial aid, help with math, knowledge of financial literacy, a focus on effort to maintain motivation, and finding persons to help with college access obligations. With an increase in educational and parental support, all high school students might be more inclined to see PSE as an attainable goal imperative to their future success.

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Appendix A: HSRRC Approval

Northern Michigan University

Continuing Education
1401 Presque Isle Avenue
Marquette, MI 49855-5301

February 20, 2009

TO: Joseph Zerbst
Education

FROM: Cynthia A. Prosen, Ph.D.
Dean of Graduate Studies & Research

RE: Human Subjects Proposal # HS09-250
"College Readiness-Making Post Secondary Success an Option for Everyone"

The Internal Review Board (IRB) has reviewed your proposal and has given it final approval. To maintain permission from the Federal government to use human subjects in research, certain reporting processes are required. As the principal investigator, you are required to:

A. Include the statement "Approved by IRB: Project # (listed above) on all research materials you distribute, as well as on any correspondence concerning this project.

B. Provide the Internal Review Board letters from the agency(ies) where the research will take place within 14 days of the receipt of this letter. Letters from agencies should be submitted if the research is being done in (a) a hospital, in which case you will need a letter from the hospital administrator; (b) a school district, in which case you will need a letter from the superintendent, as well as the principal of the school where the research will be done; or (c) a facility that has its own Institutional Review Board, in which case you will need a letter from the chair of that board.

C. Report to the Internal Review Board any deviations from the methods and procedures outlined in your original protocol. If you find that modifications of methods or procedures are necessary, please report these to the Human Subjects Research Review Committee before proceeding with data collection.

D. Submit progress reports on your project every 12 months. You should report how many subjects have participated in the project and verify that you are following the methods and procedures outlined in your approved protocol.

E. Report to the Internal Review Board that your project has been completed. You are required to provide a short progress report to the Internal Review Board in which you provide information about your subjects, procedures to ensure confidentiality/anonymity of subjects, and the final disposition of records obtained as part of the research (see Section II.C.7.c).

F. Submit renewal of your project to the Internal Review Board if the project extends beyond three years from the date of approval.

It is your responsibility to seek renewal if you wish to continue with a three-year permit. At that time, you will complete (D) or (E), depending on the status of your project.

kjm

Telephone: 906-227-2103 ■ FAX: 906-227-2108
E-mail: conteduc@nmu.edu ■ Web site: www.nmu.edu/ce

Northern Michigan University

Continuing Education
1401 Presque Isle Avenue
Marquette, MI 49855-5301

January 11, 2010

TO: **Joseph Zerbst**
Education

FROM: **Cynthia A. Prosen, Ph.D.** CP
Graduate Studies, Research & Continuing Education

RE: **Continuation of Human Subjects Proposal #HS09-250**
"College Readiness-Making Post Secondary Success an Option for Everyone"

Your request for Continuation to your Human Subjects Proposal (see above mentioned project) has been approved. Please include your proposal number on all research materials and on any correspondence regarding this project.

kjm

cc: Randy Jensen

Telephone: 906-227-2103 ■ FAX: 906-227-2108
E-mail: conteduc@nmu.edu ■ Web site: www.nmu.edu/ce

Appendix B: Administrator Release Letters

3-19-10
(DATE)

Dr. Cindy Prosen
Dean of Graduate Studies
1401 Presque Isle Avenue
Marquette, MI 49855

Dear Dr. Prosen,

Joseph Zerbst has permission to conduct research on "College Readiness" in the OA-TC (school name). The research will involve assessment of school-aged students' learning and after-high school aspirations. Students would complete the 15-minute survey and/or interview during instructional hours. Joseph Zerbst is graduate student at Northern Michigan University. He is conducting research to improve the transition from high school to college. I understand the completion of the form is voluntary and anonymous. I approve of the research and collection of data for the purposes of the research project.

Sincerely,

(Signature)	(Signature)
JAN C. QUARLESS (Printed Name)	William J. Rivest (Printed Name)
Superintendent (Title) Superintendent/Director	Principal (Title)
3-19-10 (Date)	3-19-10 (Date)
Dollar Bay-TC (School)	Dollar Bay-TC (School)

HSRRC Permission Number is HS09-250

3-19-2010
(DATE)

Dr. Cindy Prosen
Dean of Graduate Studies
1401 Presque Isle Avenue
Marquette, MI 49855

Dear Dr. Prosen,

Joseph Zerbst has permission to conduct research on "College Readiness" in the Calumet High School (school name). The research will involve assessment of school-aged students' learning and after-high school aspirations. Students would complete the 15-minute survey and/or interview during instructional hours. Joseph Zerbst is graduate student at Northern Michigan University. He is conducting research to improve the transition from high school to college. I understand the completion of the form is voluntary and anonymous. I approve of the research and collection of data for the purposes of the research project.

Sincerely,

(Signature)
Darryl A Pierce
(Printed Name)
Superintendent
(Title) Superintendent/Director
3-26-10
(Date)
Calumet
(School)

(Signature)
George Iwanchuk
(Printed Name)
CHS Principal
(Title)
3-19-2010
(Date)
Calumet High School
(School)

HSRRC Permission Number is HS09-250

3-19-10
(DATE)

Dr. Cindy Prosen
Dean of Graduate Studies
1401 Presque Isle Avenue
Marquette, MI 49855

Dear Dr. Prosen,

Joseph Zerbst has permission to conduct research on "College Readiness" in the Lake Linden-Hubbell (school name). The research will involve assessment of school-aged students' learning and after-high school aspirations. Students would complete the 15-minute survey and/or interview during instructional hours. Joseph Zerbst is graduate student at Northern Michigan University. He is conducting research to improve the transition from high school to college. I understand the completion of the form is voluntary and anonymous. I approve of the research and collection of data for the purposes of the research project.

Sincerely,

Craig Sundblad
(Signature)

Craig Sundblad
(Printed Name)

Superintendent/Principal
(Title) Superintendent/Director

3-19-10
(Date)

Lake Linden-Hubbell
(School)

(Signature)

(Printed Name)

(Title)

(Date)

(School)

HSRRC Permission Number is HS09-250

March 25, 2010
(DATE)

Dr. Cindy Prosen
Dean of Graduate Studies
1401 Presque Isle Avenue
Marquette, MI 49855

Dear Dr. Prosen,

Joseph Zerbst has permission to conduct research on "College Readiness" in the BRIDGE High School (school name). The research will involve assessment of school-aged students' learning and after-high school aspirations. Students would complete the 15-minute survey and/or interview during instructional hours. Joseph Zerbst is graduate student at Northern Michigan University. He is conducting research to improve the transition from high school to college. I understand the completion of the form is voluntary and anonymous. I approve of the research and collection of data for the purposes of the research project.

Sincerely,

Trish Sherman (Signature)	(Signature)
Trish Sherman (Printed Name)	(Printed Name)
Coordinator-BRIDGE (Title) Superintendent/Director	(Title)
March 25, 2010 (Date)	(Date)
BRIDGE High School (School)	(School)

HSRRC Permission Number is HS09-250

3/19/2010
(DATE)

Dr. Cindy Prosen
Dean of Graduate Studies
1401 Presque Isle Avenue
Marquette, MI 49855

Dear Dr. Prosen,

Joseph Zerbst has permission to conduct research on "College Readiness" in the MARQUETTE ALTERNATIVE (school name). The research will involve assessment of school-aged students' learning and after-high school aspirations. Students would complete the 15-minute survey and/or interview during instructional hours. Joseph Zerbst is graduate student at Northern Michigan University. He is conducting research to improve the transition from high school to college. I understand the completion of the form is voluntary and anonymous. I approve of the research and collection of data for the purposes of the research project.

Sincerely,

(Signature)

TONY PARLATO
(Printed Name)

DIRECTOR
(Title) Superintendent/Director

3/19/10
(Date)

MARQUETTE ALTERNATIVE HS
(School)

(Signature)

(Printed Name)

(Title)

(Date)

(School)

HSRRC Permission Number is HS09-250

3/19/2010
(DATE)

Dr. Cindy Prosen
Dean of Graduate Studies
1401 Presque Isle Avenue
Marquette, MI 49855

Dear Dr. Prosen,

Joseph Zerbst has permission to conduct research on "College Readiness" in the Jeffers H.S. (school name). The research will involve assessment of school-aged students' learning and after-high school aspirations. Students would complete the 15-minute survey and/or interview during instructional hours. Joseph Zerbst is graduate student at Northern Michigan University. He is conducting research to improve the transition from high school to college. I understand the completion of the form is voluntary and anonymous. I approve of the research and collection of data for the purposes of the research project.

Sincerely,

(Signature)
Pat Rozich
(Printed Name)
Superintendent
(Title) Superintendent/Director
3-22-10
(Date)
Jeffers High School
(School)

(Signature)
Tim Koteri
(Printed Name)
Principal
(Title)
3/19/2010
(Date)
Jeffers Hi. School
(School)

HSRRC Permission Number is HS09-250

3/19/10
(DATE)

Dr. Cindy Prosen
Dean of Graduate Studies
1401 Presque Isle Avenue
Marquette, MI 49855

Dear Dr. Prosen,

Joseph Zerbst has permission to conduct research on "College Readiness" in the Finlandia Upward Bound (school name). The research will involve assessment of school-aged students' learning and after-high school aspirations. Students would complete the 15-minute survey and/or interview during instructional hours. Joseph Zerbst is graduate student at Northern Michigan University. He is conducting research to improve the transition from high school to college. I understand the completion of the form is voluntary and anonymous. I approve of the research and collection of data for the purposes of the research project.

Sincerely,

Leona M. Luoto (Signature)	(Signature)
Leona M. Luoto (Printed Name)	(Printed Name)
Director (Title) Superintendent/Director	(Title)
3/19/10 (Date)	(Date)
Finlandia Upward Bound (School)	(School)

HSRRC Permission Number is HS09-250

Appendix C: Interview Script

Interview Script

Hello, my name is Joe Zerbst. I am a graduate student at Northern Michigan University conducting research on Upper Peninsula high school students. The questions in this interview are designed to obtain information to better prepare educators and other education professionals for assisting students with their futures. Your identity and responses will remain anonymous. The interview will take about 15 minutes. If at any time you do not want to continue with the interview, we can stop; your participation is completely voluntary. If you do not have any questions, I will proceed with the interview.

What are your plans when you leave high school?

_____
_____
_____

What are some of the skills you feel are necessary for your chosen future?

_____
_____

What are you currently doing to prepare for your future?

_____
_____
_____

What challenges have you faced or are currently facing as you move towards achieving your future goals?

_____
_____

*What do you know about **applying to college/obtaining a job**?*

_____
_____

*What do you know about obtaining **financial aid/a loan**?*

_____
_____

Who talks to you about **education/getting a job**?_____
_____

Does talking with _____ help? Why/why not_____
(name[s] above)
What do you talk about? _____

Does going to college benefit people? Why/Why not? _____
_____

How will/Would you benefit from going to college?
_____
_____

Please talk about your family's education? _____

Bold words indicate change between college track (1st) and career track (2nd) -
#HS09-250

_____
_____

(if not indicated) Does anyone have a four-year degree? Who? _____

Does _____ talk to you about going to college? If so, what does _____ talk about?
(name[s] above) (name[s] above)

_____
_____

What is your current level of education? _____

What is your gender? _____

How old are you? _____

How many years have you lived in the Upper Peninsula? _____

Do you receive free or reduced hot lunch? _____

Do you know any students who skipped school in the '09-'10 school year? _____
What did the person do when they skipped? _____
Did you skip during the '09-'10 school year? _____
Did you usually skip a class or a day? _____
Why did you choose to skip? _____
What did you do when you skipped? _____

Do you have any suggestions for how teachers and/or counselors could better support you for your chosen future?

_____
_____
_____

Thank you for your assistance, this concludes the interview

Bold words indicate change between college track (1st) and career track (2nd) - #HS09-250

Appendix D: Survey

The completion of this survey is voluntary. No names or identifying numbers will be used. Your survey answers will not affect your course grade in any way. If you decide not to participate in this study, your decision will not affect your school or course grade in any way. You may stop the survey at anytime or leave any questions blank. This survey contains items related to your education. If you have any questions about the study, you can contact Dr. Judy Puncochar at 906-227-1366 or jpuncoch@nmu.edu.

If you have any further questions regarding your rights as a participant in a research project, you may contact Dr. Cindy Prosen of the Human Subjects Research Review Committee of Northern Michigan University by telephone at (906) 227-2300 or by email at cprosen@nmu.edu. Thank you!

Circle one best answer.

1. Do you know what job or career you would like to have someday? YES NO

   If YES, what job or career would you like to have? _____

2. Do you plan on going to college? YES NO

   IF YES, name the places where you will send your college admission application.

   1) _____ 2) _____

   3) _____ 4) _____

3. What is the highest level of education you expect to achieve? (Circle one.)

   GED Diploma Certificate Associate (2-yr degree) Bachelor (4 yr degree) Master's or above

4. Who helps you to achieve the grades you receive in school? (Circle all that apply.)

Parents	Tutor – Not a fellow student
Siblings/other family members	Online help
Teachers	In-school tutoring service: _____
Counselor/Social Worker	Out-of-school tutoring service: _____
Peers (other students)	Other: _____
No one	

5. What do you see as potential challenges to achieving your educational goals? (Circle all that apply.)

Not enough financial aid	Dorm life	Childcare
High school grades	Lack of motivation	Not finding a job
Difficulty of college classes	Lack of parental support	Giving up my current job
Homesickness	Legal Issues	Substance Abuse
Online learning	Class/Work Schedules	Other:_____

6. Did your parents/guardians or sibling(s) complete a 4-year college degree? YES NO

   If YES, circle all who completed a 4-year college degree.

   Mother Father Sibling One sibling or more A grandparent

HSRRC Permission Number is HS09-250 Page 1 of 2

7. Circle the level of assistance you would require to achieve your educational goals.

	How much assistance do you require?				
	None	Moderate	Average	Above Average	A lot
Learning how to take tests	0	1	2	3	4
Learning how to study	0	1	2	3	4
Searching for financial aid	0	1	2	3	4
Completing a college application	0	1	2	3	4
Finding a college	0	1	2	3	4
Tutoring/ Mentoring	0	1	2	3	4
Managing time	0	1	2	3	4
Managing money	0	1	2	3	4
Using a computer	0	1	2	3	4
Learning how to write	0	1	2	3	4
Learning how to do math	0	1	2	3	4
Academic advising (picking a major)	0	1	2	3	4
Other: _____	0	1	2	3	4

8. Have you skipped a class since the beginning of the 09-10 school year? YES NO

IF YES, how many times?

1 2 3 4 about once a week more than once a week

9. My current Level of Education 9 10 11 12 College Student College Graduate N/A

10. Gender: _____

11. Age: _____

12. Number of years I have lived in the Upper Peninsula: _____

Thank you for your assistance, please return your form to the provided envelope.

HSRRC Permission Number is HS09-250

Page 2 of 2

Appendix E: Release Letters

January 14, 2010

Dear Parent(s) or Guardian(s),

Thank you for your continued interest in your child's education. As part of my continuing education, I am completing my master's thesis at Northern Michigan University. I would like to ask your son or daughter to complete a survey and/or interview dealing with college preparation. This information will guide future teachers and counselors in helping students prepare for college. I seek your permission to have your son or daughter complete this research. The research will be conducted in the form of an interview and/or a survey, although nothing will be presented to students who have not been given permission. The research will be conducted in approximately 15 minutes and will be completed during the school day. Your son or daughter will not be identified in any way in the reporting of the data from this research project.

Please complete the bottom portion and return to me at school if your child will be participating in this activity.

Thank you.

Joseph Zerbst
PO Box 173
Chassell, MI 49916
(906) 370 9247

- - - -

January 7, 2010
Participant Copy

I invite you to participate in a voluntary research study. The purpose of the study is to obtain knowledge of your plans after graduation. Between surveys and interviews about 250 people will take part in this study.

If you agree to participate, I would like you to complete a survey, which should take about 15 minutes. You are free to respond or not respond to any item. You may also be asked to participate in a voluntary interview based on a predetermined script. You may choose to or not to answer any of the interview questions. At anytime you may stop the survey or interviewing process. Completion of the interview and survey is voluntary and serves as permission to use your responses for research.

All information from the study will remain confidential and in a secure location. Survey and interview responses will not be disclosed outside of the investigator. Results of this study may be published for scientific purposes; however, your identity will not be revealed. Federal regulatory agencies and the Northern Michigan University Institutional Review Board (a committee that reviews and approves research studies) may inspect and copy records pertaining to this research.

There are minimal risks from being in this study. You will not benefit personally. However, we hope others may benefit in the future from what we learn from this study. You will not have any costs for being in this research study. You won't be paid for being in this research study. Taking part in this research study is voluntary. If you decide not to be part of this study, or if you stop participating at any time, you will not be penalized or lose any benefits for which you otherwise qualify.

If you have any questions regarding the nature of this research project, contact the principal investigator, Joseph Zerbst at jzerbst@nmu.edu or 906-370-9247. If you have any questions regarding your rights as a participant in a research project, you may contact Dr. Cynthia Prosen of the Human Subjects Research Review Committee of Northern Michigan University at cprosen@nmu.edu or 906-227-2300.

I have read the above "Informed Consent Statement." The nature, risks, demands, and benefits of the project have been explained to me. I understand that I may ask questions and I am free to withdraw from the project at any time without incurring ill will or negative consequences. I also understand this informed consent document will be kept separate from data collected in this project to maintain anonymity (confidentiality). I understand a copy of the consent form is for my records. I understand access to the signed consent form is restricted to principal researcher.

_____ _____

Participant's Signature Date

Thank you very much for your consideration.

Joseph Zerbst
Principle Investigator

HSRRC Permission Number: HS09-250

Appendix F: Survey Data

	L	Do?	Job?	Pln	#	EEL	Hlp	Hlp Code	Chl	Chal Code	PED	ED Cd	Tst	Std	FA	App	Fnd	Ttr	TMg	M$	Cmp	Wrt	Mth	Mjr	SKP	SKC	EDL	G	Age	UP
1	B	N	N	N	0	D	2	1,3	2	7,12	Y	3	2	2	0	0	1	1	0	1	2	2	2	1	N			M	18	18
2	B	Y	Y	Y	4	A	1	6	2	2,7	Y	2	0	0	4	4	2	1	2	0	2	2	4	1	Y	5	11	M	18	18
3	B	Y	Y	Y	1	D	3	1,3,5	1	2	N		0	0	4	4	2	1	0	2	0	0	2	3	Y	2	11	F	17	14
4	B	Y	Y	Y	3	D	3	1,2,3	2	2,7	Y	4	3	2	2	2	2	0	2	2	2	2	2	2	Y	4	11	M	18	18
5	B	Y	Y	Y	3	D	3	3,4,5	3	1,3,12	N		2	1	4	2	2	2	2	4	1	0	3	3	Y	3	12	F	18	18
6	B	N	N	Y	0	A	1	3	4	1,2,7,12	N		2	2	4	4	3	2	2	2	3	0	4	3	Y	3	11	M	18	8
7	B	Y	Y	N		A	1	6	3	1,2,3	N		2	4	2	0	0	1	3	4	0	0	0	0	Y	5	11	M	18	18
8	B	N	N	Y	2	BA	2	1,2	3	1,2,6	N		4	4	4	4	4	4	4	4	1	4	4	4	Y	5	12	M	18	1
9	B	N	N	N		C	1	6	1	2	N		2	2	2	3	2	2	3	3	3	2	2	2	Y	1	11	M	18	17
10	B	N	N	Y	4	BA	1	3	2	1,2	N		0	0	4	0	0	0	0	2	0	0	0	2	Y	4	11	F	18	18
11	B	Y	Y	Y	1						N		2	2	1	1	2	1	2	2	2	2	1	0	Y	2	12	F	21	5
12	B	Y	Y	Y	2	A	1	6	4	1,2,3,12	Y	1,3	2	2	3	2	0	2	2	3	0	0	1	1	Y	4	11	F	16	5
13	B	Y	Y	Y	3	A	1	11	2	12,15	Y	2,5	3	3	4	2	1	0	3	4	0	1	2	3	N		10	F	16	16
14	C	Y	Y	Y	3	BA	2	1,3	1	7	Y	1	0	4	3	0	0	0	2	1	0	1	2	2	Y	1	11	M	17	17
15	C	N	Y	Y	3	BA	3	1,2,3,	1	3	N		0	3	2	2	2	1	1	1	2	2	3	1	Y	4	11	F	17	17
16	C	Y	Y	Y	4	BA	2	3,6	4	2,3,7,10	Y	1,2,4,5	1	1	4	2	3	1	2	2	2	1	1	2	Y	1	11	F	17	17
17	C	Y	Y	Y	4	BA	4	1,2,3,5	6	2,3,5,6,10,12	Y	2,4	2	2	0	2	1	3	2	2	1	2	3	2	Y	2	11	F	17	9
18	C	Y	Y	Y	2	BA	2	3,5	1	2	Y	3	2	3	2	2	1	3	3	2	2	2	3	3	N		11	F	17	17
19	C	Y	Y	Y	4	MS	4	3,5,6,11	3	1,12,15	N		2	1	3	1	1	0	2	2	0	0	0	2	N		11	F	17	17
20	C	N	N	Y	1	BA	2	3,5	0		Y	1	0	1	1	0	0	0	1	0	0	0	0	4	N		11	M	17	17
21	C	Y	Y	Y	2	BA	2	3,5	1	12	N		2	0	1	1	1	0	3	0	0	0	1	1	N		11	M	17	16
22	C	N	N	Y	2	MS	1	6	1	1	Y	1,2	2	2	2	2	2	2	1	1	1	0	2	1	Y	3	10	F	16	16
23	C	Y	Y	N	3	BA	3	1,3,5	2	7,8	Y	2	3	3	1	1	0	0	0	0	0	0	3	2	N		11	M	17	17
24	C	Y	Y	Y	2	MS	1	6	0		N		2	2	2	2	2	2	1	1	1	0	2	1	Y	3	11	F	16	16
25	C	Y	Y	Y	2	BA	4	2,3,5,6	2	3,4	Y	1,5	1	1	2	1	2	0	1	1	1	1	1	1	N		11	F	17	17
26	C	Y	Y	Y	3	BA	2	3,5	1	1	N		2	3	3	3	1	1	2	2	1	1	3	2	N		11	M	16	16
27	C	N	N	Y	4	BA	3	1,3,5	3	3,7,12	Y	2,3,5	2	2	2	2	1	3	2	3	0	0	0	2	N		10	F	16	11
28	C	N	N	Y	2		2	3,5	1	3	Y	2	2	2	2	3	2	2	2	1	1	0	1	3	N		11	M	17	17
29	C	Y	Y	Y	1	BA	4	1,2,3,5	5	1,4,6,7,13	Y	1,2,4,5	0	1	2	2	0	0	0	0	1	0	1	0	Y	5	11	F	17	17
30	C	N	N	Y	4	BA	5	1,2,3,4,5	7	1,2,3,4,6,10,12	Y	2	1	1	3	2	2	1	2	3	2	0	0	3	N		11	F	17	17
31	C	Y	Y	Y	3	BA	3	5,9,10	4	1,3,10,15	N		4	4	1	4	0	3	4	2	2	3	4	0	N		11	F	17	7
32	C	N	N	Y	3	BA	2	3,5	1	7	Y	3	2	3	2	2	0	1	3	3	1	0	2	2	Y	3	12	M	17	17
33	C	N	N	Y	1	BA	1	6	3	1,7,12	Y	1,2	0	0	2	0	0	0	0	0	0	0	0	0	N		11	M	17	5
34	C	Y	Y	Y	2	BA	0		1	1	Y	3	2	2	2	2	3	2	3	2	1	2	1	2	N		11	F	16	16
35	C	Y	Y	Y	3	BA	3	3,5,6	3	3,10,12	Y	1,2,5	1	2	3	1	3	2	2	1	0	0	1	2	Y	3	11	F	16	16

	L	Do?	Job?	Pln	#	EEL	Hlp	Hlp Code	Chl	Chal Code	PED	ED Cd	Tst	Std	FA	App	Fnd	Ttr	TMg	M$	Cmp	Wrt	Mth	Mjr	SKP	SKC	EDL	G	Age	UP
36	C	Y	Y	Y	2	A	1	3	1	5	Y	1	2	2	2	2	2	0	0	0	0	0	1	1	N		11	F	16	16
37	C	N	N	Y	1	BA	1	6	2	1,10	Y	1,2,4,5	0	0	2	2	1	0	0	2	0	0	0	2	Y	3	11	M	17	17
38	C	N	N	Y	4	BA	2	3,5	2	7,12	Y	1,2,4,5	0	0	2	0	2	0	0	2	0	1	1	3	Y	3	11	M	16	16
39	C	Y	Y	Y	3	BA	2	1,3	0		Y	1,2,5	2	2	2	2	3	2	2	2	1	0	0	0	N		11	F	16	14
40	C	N	N	Y	3	MS	4	1,2,3,5	1	3	Y	1,2,3	2	2	1	1	2	0	1	0	3	3	1	1	N		11	F	17	17
41	C	Y	Y	Y	3	BA	4	1,2,3,5	2	3,10	Y	2,5	1	1	2	2	2	2	3	3	0	1	3	2	Y	1	11	F	17	17
42	C	Y	Y	Y	3	MS	3	3,4,5	2	3,10	Y	4	2	2	2	2	2	2	3	3	1	1	2	2	Y	2	12	F	18	18
43	C	Y	Y	N	0	D	1	6	1	7	Y	2,4	0	0	0	0	0	0	0	0	0	0	1	0	N		12	M	18	12
44	C	Y	Y	Y	1	BA	5	1,2,3,5,9	3	3,4,7	Y	1,2,3	1	1	2	0	0	3	0	4	0	0	1	0	N		12	F	18	12
45	C	N	N	Y	1	BA	1	6	2	3,12	Y	3	0	2	3	2	2	0	1	1	0	3	2	3	Y	2	12	F	18	18
46	C	Y	Y	Y	4	MS	4	1,2,3,5	1	1	N		1	1	2	1	3	0	1	2	0	1	1	3	N		9	M	14	14
47	C	N	N	Y	4	MS	1	6	2	4,15	Y	1,3	0	1	0	0	1	1	1	1	0	0	0	0	Y	2	9	F	15	15
48	C	Y	Y	Y	3	BA	3	1,2,3	2	2,3	Y	1	0	0	1	1	2	2	2	1	0	0	2	1	N		9	F	14	14
49	C	Y	Y	Y	4	BA	4	1,2,3,5	0		Y	3	0	0	1	1	1	0	1	1	0	0	0	1	N		9	F	14	14
50	C	Y	Y	Y	4	C	2	1,3	0		Y	1,2																		
51	C	Y	Y	Y	3	A	2	3,5	3	1,3,12	N		1	2	3	2	2	0	1	3	1	0	0	2	N		9	M	14	14
52	C	Y	Y	Y	3	MS	2	1,5	3	1,2,7	N		0	3	1	2	1	0	2	1	0	0	2	2	N		9	F	14	14
53	C	Y	Y	Y	1	MS	1	3	1	15	Y	2	0	1	3	4	2	0	1	2	3	2	1	1	N		9	M	15	15
54	C	Y	Y	Y	4	MS	3	3,5,6	1	7	Y	2,5	1	1	2	2	2	1	1	1	0	0	0	0	N		9	M	14	14
55	C	N	N	Y	4	BA	3	2,3,5	0		Y	2	0	0	0	1	1	0	0	0	0	0	0	1	N		9	F	14	14
56	C	N	N	Y	1	MS	2	1,3	1	1	N		0	0	4	2	0	0	0	1	0	0	0	0	N		9	M	14	14
57	C	N	N	Y	4	BA	2	1,3	2	3,6	Y	1,2,5	0	0	2	1	1	1	0	0	0	0	0	1	N		9	M	14	14
58	C	Y	Y	Y	1	BA	4	1,2,3,5	0		Y	2	2	3	2	2	1	2	1	1	0	0	0	1	N		9	M	14	13
59	C	Y	Y	Y	1	BA	1	6	1	7	N		2	1	2	2	0	0	0	0	0	1	2	3	N		9	M	15	15
60	C	N	N	Y	2	A	4	1,2,3,5	3	3,12,15	Y	2	1	2	4	2	2	1	2	2	1	0	1	2	N		9	F	15	15
61	C	Y	Y	Y	4	MS	4	1,2,3,5	1	3	Y	1,2	1	1	4	4	4	4	1	1	1	2	2	4	N		9	F	15	11
62	C	Y	Y	Y	2	BA	1	6	0		N		2	2	4	2	2	3	2	2	2	2	2	3	N		9	M	14	14
63	C	N	N	Y	3	BA	2	3,5	1	3	Y	1,2,5	0	1	3	3	2	0	0	1	0	0	0	2	N		9	F	14	14
64	C	Y	Y	Y	2	MS	2	3,5	2	1,12	Y	1	0	0	2	1	2	0	4	3	0	0	0	2	N		9	F	15	15
65	C	N	N	Y	1	BA	1	6	1	7	Y	1,2	0	0	0	1	1	0	0	1	0	0	0	2	N		9	M	15	9
66	C	Y	Y	Y	4	MS	1	6	1	3	Y	1	1	1	2	1	2	2	2	3	0	1	2	1	N		9	F	14	11
67	C	N	N	Y	3	BA	3	1,3,5	5	2,3,5,7,12	Y	2	2	1	3	2	2	1	2	2	1	3	1	3	N		9	M	15	15
68	C	N	N	Y	4	BA	2	3,5	4	2,3,7,12	Y	2	2	3	1	2	3	1	3	3	1	2	3	3	N		9	M	15	15
69	C	N	N	Y	1	A	4	1,2,3,5	0		Y	2	0	0	2	2	1	0	0	2	1	1	1	1	N		9	F	15	15
70	C	Y	Y	Y	1	A	3	1,3,11	3	2,10,13	N		1	1	2	3	3	2	1	1	1	0	3	0	N		9	M	15	15

	L	Do?	Job?	Pln	#	EEL	Hlp	Hlp Code	Chl	Chal Code	PED	ED Cd	Tst	Std	FA	App	Fnd	Ttr	TMg	M$	Cmp	Wrt	Mth	Mjr	SKP	SKC	EDL	G	Age	UP
71	C	N	N	Y	3	A	4	1,2,3,5	1	15	Y	2,3	0	1	2	2	2	2	2	2	2	1	1	2	N		9	F	15	15
72	C	N	N	Y	1	A	1	6	1	1	N		0	0	2	2	1	0	0	1	0	0	0	0	N		9	F	15	15
73	C	Y	Y	Y	3	MS	2	3,10	2	1,12	N		0	0	2	2	2	1	0	1	0	2	0	2	N		9	F	14	14
74	C	Y	Y	Y	4	BA	1	1	1	2	Y	1,2	2	4	1	2	2	2	3	4	3	2	2	3	N		9	M	15	15
75	C	Y	Y	Y	2	BA	1	3	1	12	Y	2	3	1	2	2	3	3	0	0	1	2	3	4	N		9	M	14	14
76	C	Y	Y	Y	2	C	2	3,5	1	3	Y	2,4	0	0	0	0	0	0	1	2	1	1	0	0	N		12	M	18	18
77	C	Y	Y	Y	1	BA	4	1,2,3,5	2	3,10	Y	2	0	0	1	0	0	0	0	0	0	0	0	0	N		12	F	17	17
78	C	Y	Y	Y	1	BA	3	2,3,5	1	3	Y	1,2,5	0	1	1	0	0	2	1	1	0	0	1	1	N		12	F	17	17
79	C	Y	Y	Y	1	BA	1	5	0		Y	1,2	0	0	0	0	0	0	0	0	0	0	0	0	N		12	F	18	13
80	C	Y	Y	Y	4	BA	1	5	2	2,7	Y	1	3	2	4	2	0	3	4	4	0	0	3	0	Y	4	12	M	18	18
81	C	N	N	Y	2	BA	3	1,3,5	1	2	N		2	2	2	2	2	2	2	2	2	2	2	2	N		12	M	18	18
82	C	Y	Y	Y	4		4	1,2,3,5	1	2	Y	4	2	2	2	2	2	1	1	1	0	0	2	1	N		10	M	16	16
83	C	N	N	Y	1	BA	3	3,5,6	3	1,3,12	N		0	1	1	1	0	0	1	1	0	1	0	1	N		12	M	17	17
84	C	N	N	Y	3	BA	2	3,5	3	1,3,10	Y	1	3	2	2	0	0	2	1	3	0	2	3	2	Y	1	11	F	17	17
85	C	N	N	Y	0	BA	1	5	2	1,7	Y	2,5	1	4	4	2	4	0	3	4	2	0	1	2	Y	1	10	F	15	3
86	C	N	N		0		2	1,3	1	3	N		2	3	3	2	1	3	2	2	2	2	3	2	Y	3	11	M	17	17
87	C	Y	Y	Y	3	BA	4	1,2,3,5	0		N		1	1	2	2	1	0	1	1	0	0	0	2	N		11	F	17	17
88	C	Y	Y	N	0	D	2	5,6	5	1,2,3,8,13	N		1	2	3	2	0	1	2	1	2	1	1	1	N		11	M	17	17
89	C	Y	Y	Y	4	A	3	3,5,6	4	3,4,6,12	N		0	1	3	4	2	1	2	3	0	0	0	0	N		11	F	16	16
90	C	Y	Y	N	0	D	2	3,5	2	2,7	N		4	4	4	2	2	3	3	3	0	0	2	3	Y	3	11	M	18	18
91	C	Y	Y	Y	1	BA	4	1,2,3,5	4	1,12,13,15	Y	5	0	2	4	0	0	0	4	4	0	0	0	4	Y	3	12	M	18	17
92	C	N	N	Y	4	MS	2	3,5	2	1,4	Y	2	1	1	3	2	2	1	1	3	1	2	3	2	N		11	F	16	16
93	C	Y	Y	Y	2	BA	1	6	0		N		0	1	2	1	1	0	1	1	0	0	1	1	N		12	M	18	18
94	C	N	N	Y	3	MS	3	1,3,5	3	1,8,12	N		1	2	4	4	4	2	1	2	0	1	3	4	N		11	F	17	7
95	C	Y	Y	Y	1	BA	1	6	0		Y	3	0	0	1	0	0	0	0	0	1	1	0	0	Y	4	11	M	17	17
96	C	N	N	Y	4	BA	1	11	3	1,3,12	Y	1,2	1	1	3	3	2	0	0	2	0	0	1	2	N		11	F	17	17
97	C	N	N	Y	3		1	6	0		Y	2	0	0	1	1	1	0	0	1	0	0	0	1	N		10	M	15	15
98	C	N	N	Y	1	BA	3	1,3,5	3	3,7,10	Y	1,2,5	2	2	1	1	2	0	1	1	0	1	1	2	N		12	F	17	17
99	C	Y	Y	Y	2	MS	3	1,3,5	2	1,3	Y	1	0	0	2	1	0	0	1	1	0	0	0	0	N		12	F	17	17
100	C	Y	Y	Y	4	BA	2	3,5	0		Y	1,2,3	1	1	1	0	1	2	1	1	0	0	0	0	Y	1	12	F	18	18
101	C	N	N	Y	1	BA	2	1,5	2	3,7	Y	4	1	1	2	2	0	1	2	1	1	1	2	2	N		12	M	17	14
102	C	Y	Y	Y	2	MS	4	1,2,3,5	2	1,12	N		0	0	2	2	0	0	0	0	0	0	1	0	N		12	F	17	17
103	C	Y	Y	Y	3	BA	2	1,3	3	3,4,6	N		1	2	2	1	2	3	0	0	2	0	1	0	N		12	F	17	17
104	C	Y	Y	Y	1	BA	1	6	2	1,12	N		3	3	3	0	0	2	2	4	0	0	4	0	N		12	F	17	17
105	C	Y	Y	Y	2	BA	5	1,3,5,9,10	3	2,3,7	N		2	2	3	3	2	2	2	3	3	3	3	0	N		11	F	16	16

	L	Do?	Job?	Pln	#	EEL	Hlp	Hlp Code	Chl	Chal Code	PED	ED Cd	Tst	Std	FA	App	Fnd	Ttr	TMg	M$	Cmp	Wrt	Mth	Mjr	SKP	SKC	EDL	G	Age	UP
106	C	N	N	Y	3	BA	3	1,3,5	3	1,3,4	N		0	0	2	1	1	0	0	0	0	0	0	2	Y	2	12	F	18	8
107	C	Y	Y	Y	1	BA	2	1,4	3	1,3,13	Y	4	4	4	2	2	2	4	4	4	2	4	2	0	N		12	M	18	18
108	C	Y	Y	Y	1	A	2	3,5	3	1,12,13	Y	3	0	0	2	2	1	1	0	0	0	0	0	0	N		12	F	18	18
109	C	Y	Y	Y	4	BA	3	1,3,5	5	2,3,4,7,12	N		0	0	2	3	2	0	2	2	0	3	4	1	Y	2	12	F	18	17
110	C	Y	Y	Y	1	MS	6	1,2,3,5,7,8	3	3,4,6	Y	4	0	0	0	0	0	0	0	0	0	0	0	0	N		12	F	18	18
111	C	Y	Y	Y	3	BA	3	1,3,5	2	1,7	Y	1,2	2	2	3	3	1	2	2	2	1	2	2	0	N		11	F	18	18
112	C	Y	Y	Y	1	MS	1	6	1	13	N		0	0	1	0	0	1	0	0	1	0	4	0	N		12	F	18	9
113	C	Y	Y	Y	1	MS	4	1,2,3,5	2	3,4	Y	1,2	0	0	0	0	1	0	0	0	0	0	0	0	N		12	F	17	12
114	C	Y	Y	Y	1	D	1	3	1	2	Y	4	0	0	1	1	0	2	0	0	0	0	1	0	N		12	M	18	18
115	C	Y	Y	Y	1	D	1	3	1	4	Y	1	0	0	1	1	0	1	2	1	0	0	2	1	N		12	M	19	9
116	C	Y	Y	Y	1	MS	4	1,3,5,11	1	3	Y	1,2,5	0	0	0	0	0	0	0	0	0	1	1	1	N		12	F	18	12
117	C	Y	Y	Y	3	A	3	1,3,5	1	3	Y	1	0	1	3	1	1	0	1	1	1	1	1	1	Y	2	12	F	18	18
118	C	Y	Y	Y	4	BA	3	1,3,5	3	3,10,15	Y	2,3	0	1	0	1	0	0	1	2	2	0	0	2	N		12	F	18	18
119	C	Y	Y	Y	2	MS	1	3	2	4,7	Y	2	0	1	1	0	0	0	1	1	0	0	0	0	Y	5	12	F	18	18
120	C	Y	Y	Y	2	BA	3	1,3,4	4	1,3,10,13	Y	1	1	1	2	2	3	2	2	1	2	3	1	2	Y	4	12	F	17	17
121	C	N	N	Y	1	A	1	6	2	3,12	N		2	3	2	1	0	0	2	3	1	0	1	4	Y	4	12	M	17	17
122	D	N	N	Y	3	BA	2	3,6	3	3,7,10	Y	5	1	2	2	1	2	1	3	0	0	1	1	2	Y	5	12	M	18	18
123	D	Y	Y	Y	2	BA	4	2,3,4,8	2	1,3	Y	3	2	1	3	0	0	0	0	0	0	0	1	0	Y	5	12	F	18	12
124	D	Y	Y	Y	1	BA	3	2,3,5	2	1,3	Y	2,5	0	2	2	1	1	1	2	0	0	3	4	1	Y	2	11	F	16	3
125	D	Y	Y	Y	1	BA	1	3	2	3,12	Y	2	0	0	2	2	0	1	1	1	0	0	3	1	N		11	F	17	17
126	D	Y	Y	Y	2	MS	3	1,3,5	1	12	Y	1,2,4	2	1	2	1	1	1	2	1	2	1	1	1	N		11	F	18	4
127	D	Y	Y	Y	1	BA	3	1,2,6	1	7	Y	1,2,3,4	3	2	2	2	2	2	2	2	2	2	2	2	Y	4	11	M	17	17
128	D	Y	Y	Y	3	A	3	1,3,5	3	1,3,5	Y	2	1	3	2	1	1	1	12	2	0	0	1	1	Y	2	11	F	16	16
129	D	Y	Y	Y	1	BA	3	1,3,5	2	3,10	Y	2	1	0	3	2	2	1	1	2	2	3	3	2	Y	2	11	F	17	10
130	D	Y	Y	Y	1	BA	1	6	1	3	Y	2	1	1	2	2	0	0	0	1	1	2	0	3	Y	1	11	M	17	11
131	D	N	N	N	0	D	3	1,3,5	1	12	N		2	1	2	1	0	0	0	0	0	0	0	2	Y	1	11	F	16	16
132	D	Y	Y	Y	4	BA	1	6	2	1,2	N		0	1	4	1	0	0	0	0	0	0	0	0	N		11	F	17	17
133	D	Y	Y	Y	3	BA	4	1,2,3,8	3	1,3,10	N		2	2	3	1	1	1	1	1	1	1	1	2	N		11	F	16	16
134	D	Y	Y	Y	4	BA	1	3	5	1,3,7,10,12	N		2	3	4	3	2	2	3	3	0	1	2	2	N		11	M	17	17
135	D	Y	Y	Y	2	MS	6	1,2,3,4,5,8	3	1,3,13	Y	4	2	2	3	2	1	1	1	1	1	1	1	1	N		11	M	17	17
136	D	Y	Y	Y	4	BA	4	1,2,3,5	4	1,3,12,13	N		4	4	4	4	2	4	3	4	3	2	4	2	N		11	F	17	17
137	D	Y	Y	Y	4	BA	1	6	1	2	`N		3	3	1	1	1	2	0	1	0	3	2	3	Y	1	11	M	18	18
138	D	N	N	Y	2	BA	1	3	1	6	Y	2	2	2	2	2	3	2	3	3	3	2	2	3	N		12	F	18	18
139	F	Y	Y	Y	1	A	4	1,3,5,11	1	12	N		0	1	2	2	1	0	0	0	0	0	0	2	N		10	F	16	16
140	F	N	N	Y	2	BA	3	1,2,3	2	10,12	N		1	2	2	2	1	1	2	2	1	0	0	1	Y	3	10	M	17	17

	L	Do?	Job?	Pln	#	EEL	Hlp	Hlp Code	Chl	Chal Code	PED	ED Cd	Tst	Std	FA	App	Fnd	Ttr	TMg	M$	Cmp	Wrt	Mth	Mjr	SKP	SKC	EDL	G	Age	UP
141	F	Y	Y	Y	2	BA	3	1,3,5	1	1	N		4	4	4	2	0	1	4	0	1	3	0	3	N		9	M	14	8
142	F	Y	Y	Y	3	BA	4	1,3,5,11	1	1	Y	1,4	2	3	4	2	0	3	4	4	0	0	4	2	N		10	F	15	15
143	F	Y	Y	Y	2	A	3	1,3,5	1	2	N		1	3	2	2	1	2	3	3	0	0	3	3	N		10	F	15	8
144	F	Y	Y	Y	1	BA	3	3,5,10	2	1,7	N		2	3	2	0	0	1	3	1	0	0	3	2	N		12	M	18	18
145	F	Y	Y	Y	3	BA	3	1,5,6	0		N		0	0	2	2	0	0	0	0	0	0	0	0	N		9	F	15	13
146	F	Y	Y	Y	3	BA	1	6	2	1,3	N		2	2	3	4	3	3	3	2	4	4	2	3	Y	2	12	F	19	19
147	F	Y	Y	Y	1	BA	2	1,7	2	7,8	Y	1,2	3	3	2	2	2	3	3	2	3	3	3	1	Y	1	11	M	18	18
148	F	N	N	Y	3	MS	2	5,11	3	2,4,12	N		3	3	3	3	2	2	3	2	0	3	0	3	N		11	F	16	12
149	F	N	N	Y	1	BA	1	6	1	7	N		0	3	1	0	0	1	0	3	0	0	4	0	Y	4	12	M	18	7
150	F	N	N	Y	4	A	5	1,2,3,5,7	4	2,3,7,12	Y	4	3	4	3	3	2	1	4	2	2	2	3	2	Y	1	10	M	17	17
151	F	Y	Y	Y	3	BA	1	6	1	1	N		0	1	1	0	0	0	2	1	0	2	2	3	N		12	M	17	14
152	F	N	N	Y	2	BA	4	1,3,5,7	1	12	N		2	1	2	3	3	0	1	1	2	3	0	4	N		11	M	17	17
153	F	Y	Y	Y	4	BA	4	1,3,5,10	4	1,2,8,12	N		3	3	4	1	2	1	3	3	1	1	3	3	N		9	F	14	8
154	F	Y	Y	Y	2	A	3	1,5,8	1	1	N		3	0	4	3	0	0	0	1	0	0	3	0	N		10	F	15	15
155	F	Y	Y	Y	4	BA	1	6	1	15	N		0	2	1	1	0	2	4	2	1	1	1	1	N		9	M	14	12
156	F	Y	Y	Y	2	MS	1	5	0		N		0	0	3	3	2	2	1	1	1	1	1	2	N		10	F	16	16
157	F	N	N	Y	0	A	1	6	4	1,2,7,10	N		1	0	1	2	2	0	1	2	0	0	2	3	N		11	M	17	17
158	F	N	N	Y	0	BA	1	1	3	1,3,12	N		2	2	4	3	4	1	2	3	0	0	1	4	N		10	F	15	15
159	F	N	N	Y	4	BA	1	6	1	1	N		0	2	4	2	2	0	2	4	1	1	1	2	N		10	F	15	15
160	F	Y	Y	Y	4	BA	1	6	1	1	N		0	3	4	2	2	0	4	4	2	1	1	2	N		10	F	16	16
161	F	Y	Y	Y	2	BA	2	1,2	3	1,2,3	Y	1,3	2	2	2	1	2	2	2	1	0	0	2	0	N		10	F	17	17
162	J	Y	Y	Y	2	BA	4	1,2,3,5	2	3,12	N		2	2	3	1	2	1	1	3	1	1	1	3	Y	1	9	F	14	14
163	J	N	N	Y	4	MS	3	1,3,5	3	1,4,12	N		0	0	3	2	1	0	3	2	0	0	0		N		9	M	16	16
164	J	N	N	Y	2	BA	1	6	0		Y	2,4	1	1	2	2	2	1	1	1	1	2	1	1	N		9	F	14	14
165	J	N	N	Y	0	A	1	6	2	1,3	Y	3	1	2	3	2	1	0	0	0	0	1	0	2	N		9	F	14	14
166	J	Y	Y	Y	4	BA	3	1,3,5	1	1	Y	2,5	2	1	3	2	1	0	0	0	1	0	1	1	N		9	F	14	10
167	J	Y	Y	Y	2	BA	2	3,5	2	5,7	N		2	2	2	3	3	1	3	1	1	1	1	2	N		9	M	14	10
168	J	Y	Y	Y	1	MS	2	1,2	2	1,8	Y	2,5	1	1	2	2	3	0	0	0	0	0	0	1	N		9	F	15	15
169	J	Y	Y	Y	2	BA	3	1,3,5	1	1	N		1	2	2	2	1	0	1	3	0	0	0	1	N		9	F	14	14
170	J	Y	Y	Y	2	A	1	5	4	1,10,12,13	Y	1,2,4,5	0	0	3	2	1	0	0	0	0	0	0	2	N		9	M	14	14
171	J	Y	Y	Y	0	BA	2	3,5	2	1,12	Y	2,5	1	0	2	1	2	0	1	1	1	0	0	1	N		9	F	15	15
172	J	Y	Y	Y	3	A	3	1,3,4	4	1,3,10,12																				
173	J	N	N	Y	4	A	3	2,3,5	4	2,3,7,12	Y	4	3	2	3	2	2	4	2	2	2	2	4	2	Y	1	10	M	17	17
174	J	Y	Y	Y	4	BA	1	6	2	7,12	Y	5	0	2	2	1	0	0	0	0	0	0	0	0	Y	2	11	M	16	4
175	J	Y	Y	Y	3	BA	3	2,3,5	2	1,6	Y	4	0	0	1	0	0	0	0	0	0	0	0	0	N		12	F	18	18

	L	Do?	Job?	Pln	#	EEL	Hlp	Hlp Code	Chl	Chal Code	PED	ED Cd	Tst	Std	FA	App	Fnd	Ttr	TMg	M$	Cmp	Wrt	Mth	Mjr	SKP	SKC	EDL	G	Age	UP
176	J	Y	Y	Y	0	A	1	6	1	7	Y	1,2	2	2	2	2	2	2	2	2	2	2	2	Y	5	12	M	17	2
177	J	Y	Y	Y	3	BA	1	6	3	2,3,12	Y	3	2	3	2	1	0	1	1	0	0	0	2	0	Y	5	12	M	18	18
178	J	Y	Y	Y	1	BA	1	6	1	1	N		0	0	3	1	1	0	0	0	0	0	2	1	N		12	F	18	18
179	J	Y	Y	Y	2	D	1	3	1	1	N		0	0	0	0	0	0	1	0	0	0	0	0	N		12	F	18	17
180	J	Y	Y	Y	3	BA	4	1,2,3,5	1	6	Y	1,2,4	0	0	2	0	0	0	0	0	0		0	2	N		12	F	18	18
181	J	N	N	Y	2	BA	3	1,3,5	1	3	Y	1,2,4,5	0	0	2	0	1	0	1	1	1	0	0	4	N		12	M	17	17
182	J	Y	Y	Y	2	BA	1	6	2	2,7	N		3	2		4	4	1	1	0	4	4	3	1	Y	4	12	M	18	18
183	J	Y	Y	Y	3	A	1	6	1	2	N		0	2	4	4	0	2	2	0	0	0	4	0	N		12	M	19	19
184	J	Y	Y	Y	3	BA	1	6	2	1,3	Y	4	1	1	2	1	0	1	1	2	1	0	1	0	N		12	F	18	18
185	J	N	N	Y	2	BA	4	1,3,5,8	2	1,7	Y	1	0	1	2	0	0	1	2	1	0	0	0	1	Y	3	12	M	18	18
186	J	N	N	Y	1	BA	4	1,2,3,5	2	1,10	N		0	0	2	0	0	0	0	0	0	0	0	0	N		12	M	18	18
187	J	Y	Y	Y	2		1	6	2	1,3	Y	4	0	0	2	1	1	0	0	0	0	0	1	1	N		12	F	17	17
188	J	Y	Y	Y	2	A	2	3,5			Y	2,3	0	0	2	1	2	0	1	1	0	1	0	2	N		12	F	17	15
189	J	Y	Y	Y	1	MS	5	1,2,3,4,5	3	1,3,10	N		2	1	4	2	2	1	3	4	1	1	2	3	Y	2	12	M	18	18
190	J	Y	Y	Y	1	BA	3	1,3,5	1	1	Y	1,3	2	2	3	2	3	2	2	3	2	2	1	2	Y	1	12	M	18	18
191	J	Y	Y	Y	4	C	4	1,3,4,5	3	4,12,14	N		2	2	2	3	3	3	0	1	4	4	4	3	Y	4	12	M	18	18
192	J	Y	Y	Y	1	D	1	3	3	1,3,12	Y	3	1	1	2	0	0	2	0	1	3	1	4	2	Y	3	12	F	19	19
193	J	Y	Y	Y	1	BA	2	3,5	1	3	N		1	1	1	1	1	1	1	1	1	1	1	1	Y	1	12	F	18	18
194	J	Y	Y	Y	2	BA	1	6			N		1	0	1	1	0	0	1	0	0	0	1	1	N		10	F	16	16
195	J	N	N	Y	4	BA	1	5	2	1,7	N		0	0	1	1	1	0	0	0	0	0	0	1	Y	5	11	M	17	17
196	J	Y	Y	Y	4	BA	1	5	5	2,3,7,10,12	N		2	3	0	0	2	0	3	1	0	0	4	3	Y	4	10	F	16	16
197	J	N	N	N	0	D	1	3	1	2	N		1	1	2	1	2	3	1	2	3	2	3	2	Y	2	11	F	16	16
198	J	Y	Y	Y	4	BA	3	3,5,6	2	2,3	Y	1,2	1	1	2	2	1	1	1	0	1	0	2	2	N		9	F	15	15
199	J	N	N	Y	3	BA	4	1,2,3,4	1	1	N	0	0	2	1	1	0	0	0	0	0	0	0	2	N		10	M	16	1
200	J	Y	Y	Y	2	BA	2	3,5	4	1,3,7,12	N		2	2	2	2	1	1	2	2	1	1	2	1	N		11	M	17	17
201	J	Y	Y	Y	2	BA	3	1,2,3			Y	1,2,4	2	2	2	2	2	2	2	2	3	2	1	2	N		10	M	16	16
202	J	N	N	Y	3	A	3	3,5,7	3	3,7,10	N	1	2	3	2	1	2	1	1	0	0	0	0	2	N		10	M	16	15
203	J	N	N	Y	3	MS			2	1,12	Y	5	1	1	3	2	2	1	0	0	2	1	0	2	N		11	F	17	17
204	J	Y	Y	Y	2	BA	2	1,3	3	1,10,12	N		0	2	3	3	1	2	2	3	0	0	0	2	Y	2	11	F	17	17
205	J	Y	Y	Y	3	A	3	1,3,5	2	3,5	N		0	2	2	2	2	1	2	2	0	0	0	2	Y	2	10	F	16	16
206	J	Y	Y	Y	4	MS	3	1,5,11	4	1,7,10,12	Y	1,2	0	1	3	0	0	0	2	3	0	0	3	2	Y	4	12	F	17	17
207	J	Y	Y	Y	3	BA	1	6	4	1,3,7,12	N		4	3	3	1	1	1	2	3	0	0	0	1	N		12	M	18	17
208	J	Y	Y	Y	2	BA	3	1,3,5	2	1,3	Y	2,3	1	1	2	2	1	1	1	1	1	1	1	1	Y	4	11	M	16	11
209	J	Y	Y	Y	3	BA	4	1,2,3,5	2	3,12	Y	1,2	2	1	0	2	3	1	1	2	1	3	3	1	Y	3	10	F	15	15
210	J	Y	Y	Y	3	A	2	1,5	1	12	N		2	2	2	2	2	2	2	2	2	2	2	2	Y	1	12	F	16	16

	L	Do?	Job?	Pln	#	EEL	Hlp	Hlp Code	Chl	Chal Code	PED	ED Cd	Tst	Std	FA	App	Fnd	Ttr	TMg	M$	Cmp	Wrt	Mth	Mjr	SKP	SKC	EDL	G	Age	UP
211	L	Y	Y	Y	3	BA	2	3,5	4	1,2,3,4	N		1	2	3	1	2	1	4	3	2	1	3	1	Y	2	10	M	15	7
212	L	Y	Y	Y	2	MS	1	6	1	3	Y	1,2,5	1	2	2	2	1	1	2	1	1	2	2	2	N		10	F	15	12
213	L	N	N	Y	2	BA	4	1,2,3,5	3	1,5,6	Y	1,5	2	1	3	3	2	2	1	2	1	1	1	2	N		10	F	16	6
214	L	Y	Y	Y	3	BA	4	1,2,3,5	0		N		0	0	0	0	0	0	0	0	0	1	0	0	N		10	F	15	15
215	L	N	N	Y	3	BA	1	3	1	7	Y	1,2	0	1	1	0	0	0	2	0	0	0	0	2	N		10	M	16	16
216	L	Y	Y	Y	4	MS	1	6	4	7,10,12,15	Y	1,2,3,5	0	2	1	0	1	0	0	1	0	0	0	0	N		10	M	16	16
217	L	N	N	Y	3	BA	1	6	3	6,7,14	Y	1,5	0	1	1	3	1	1	4	2	0	1	0	2	N		10	M	15	15
218	L	N	N	Y		BA	1	3	0		Y	4	1	1	2	2	2	1	1	1	1	1	1	2	N		10	F	16	16
219	L	Y	Y	Y	4	BA	1	3	1	1	Y	1,2,5	1	0	2	1	1	1	1	1	0	2	1	1	N		10	F	15	15
220	L	Y	Y	Y	4	MS	3	1,3,4	0		Y	1,2	0	0	0	0	2	0	0	2	0	2	2	1	N		10	M	16	16
221	L	Y	Y	Y	3	MS	1	6	2	7,12	Y	1,2	1	1	2	2	2	1	2	1	0	1	3	1	Y	5	10	F	15	15
222	L	Y	Y	Y	1	A	1	6	2	2,3	N		0	1	1	1	1	0	1	1	0	0	1	2	N		10	F	15	14
223	L	Y	Y	Y	4	BA	3	1,2,3	3	1,3,10	Y	4	1	2	4	2	2	3	4	4	1	1	1	2	N		10	F	15	15
224	L	N	N	Y	3	MS	3	1,3,5	2	1,12	Y	1	0	1	1	2	2	0	1	1	0	0	0	1	N		10	M	15	15
225	L	N	N	Y	4	BA	4	1,2,3,5	2	1,3	N		2	2	2	2	2	1	1	1	0	1	2	2	N		10	F	16	16
226	L	Y	Y	Y	4	MS	1	5	2	1,7	N		0	2	4	2	2	3	2	2	0	2	3	2	N		10	M	16	15
227	L	Y	Y	Y	2	BA	1	5	5	1,3,7,10,12	Y	2	1	2	2	3	0	2	2	0	0	1	1	3	N		10	F	16	16
228	L	N	N	Y	4	MS	2	3,5	3	1,3,6	N		3	3	3	3	3	2	2	3	2	2	2	3	N		10	F	16	16
229	L	N	N	Y	4	A	5	1,2,3,4,5	5	2,6,7,9,14	Y	1,2,5	1	2	2	2	3	2	2	2	1	0	2	2	Y	1	10	M	16	13
230	L	N	N	Y	2	BA	3	3,5,6	2	3,7	N		0	1	0	2	1	0	1	3	3	0	0	1	N		10	M	15	15
231	L	Y	Y	Y	3	A	3	3,4,5	2	3,12	N		2	2	3	4	4	2	2	1	2	2	1	3	N		10	F	15	15
232	L	N	N	Y	2	A	1	6	3	6,7,10	Y	3	0	0	1	1	1	0	1	1	1	0	0	0	N		10	F	15	15
233	L	Y	Y	Y	3	BA	4	1,2,3,5	2	3,7	Y	1,2,3	4	4	2	2	2	1	2	3	1	1	4	3	N		10	F	16	16
234	L	Y	Y	Y	2	BA	2	1,3	4	1,3,6,12	Y	1	2	2	2	2	2	2	1	1	3	3	1	2	N		10	F	16	16
235	L	Y	Y	Y	3	BA	1	5	1	12	Y	2,5	3	3	4	2	1	0	3	4	0	1	2	3	N		10	F	16	16
236	L	Y	Y	Y	2	A	1	6	4	1,2,3,12	Y	1,3	2	2	3	2	0	2	2	3	0	0	1	1	Y	4	11	F	16	5
237	M	Y	Y	Y	2	BA	3	1,2,3	2	3,5	Y	2,5	2	3	2		2	1	1	1	2	3	1	2	N		9	M	14	14
238	M	N	N	Y	2	A	2	3,5	6	3,6,7,8,10,13	Y	1,2	1	2	3	2	2	0	1	2	0	0	1	3	Y	4	12	F	18	18
239	M	Y	Y	Y	4	BA	3	1,3,5	0		N		2	2	1	0	2	1	0	2	0	2	1	0	Y	2	12	F	18	8
240	M	Y	Y	Y	1	MS	3	3,4,8	2	1,12	N		0	2	4	0	0	2	2	3	0	0	4	0	Y	4	12	F	17	17
241	M	Y	Y	Y	1	C	2	1,3	0		N		0	0	2	0	0	0	0	0	0	0	0	0	N		12	F	18	8
242	M	Y	Y	Y	2	MS	1	3	3	1,11,12	N		4	4	4	2	2	1	3	1	0	0	0	0	N		12	F	20	20
243	M	Y	N	N	0		1	3	3	2,3,10	N		3	3	2	3	2	1	2	3	1	4	4	3	Y	5	10	M	16	16
244	M	Y	Y	Y	2	D	1	3	4	1,2,4,12	N		0	2	4	4	4	2	0	0	0	0	2	4	Y	5	12	F	18	16
245	M	Y	Y	Y	1	BA	2	1,3	1	2	N		2	2	2	3	2	2	2	2	3	2	3	2	Y		12	M	18	18

	L	Do?	Job?	Pln	#	EEL	Hlp	Hlp Code	Chl	Chal Code	PED	ED Cd	Tst	Std	FA	App	Fnd	Ttr	TMg	M$	Cmp	Wrt	Mth	Mjr	SKP	SKC	EDL	G	Age	UP
246	M	Y	Y	Y	4	MS	2	3,5	5	1,2,10,12,13	N		2	2	4	4	1	2	4	4	1	1	1	2	N		12	M	19	19
247	M	Y	Y	Y	2	A	1	3	0		Y	1	3	2	1	1	1	1	1	1	1	0	0	0	N		11	M	17	10
248	M	N	N	Y	3	A	1	6	3	1,2,3,	N		2	1	2	3	1	1	2	2	2	1	1	2	N		12	F	18	18
249	M	Y	Y	Y	0	MS	2	3,5	6	1,2,3,7,11,14	N		2	1	1	3	3	3	1	3	1	0	4	2	Y	2	11	F	16	3
250	M	Y	Y	N	0	C	1	6	3	1,10,12	N		0	0	2	2	0	0	1	0	0	0	4	0	Y	5	12	F	17	17
251	M	N	N	N	0	D	4	1,2,3,5	8	1,2,5,6,7,8,9,12	Y	1	3	4	2	0	0	0	4	4	3	0	4		Y	4	12	M	18	8
252	M	Y	Y	Y	1	A	1	9	1	5	N		0	0	1	0	2	1	1	1	2	1	2	2	Y	4	12	M	17	10
253	M	Y	Y	Y	2	BA	3	3,5,7	4	1,2,7,12	N		0	3	2	1	0	2	4	2	0	0	3	0	Y	2	12	F	17	17
254	M	Y	Y	Y	1	A	3	1,3,8	1	3	N		0	0		2	0	0	0	0	0	0	0	0	Y	3	11	M	17	7
255	M	N	N	Y	3	BA	1	6	3	1,2,12	N		0	0	4	2	3	0	1	0	0	1	0	4	N		11	M	16	16
256	M	Y	Y	Y	2	BA	2	3,5	2	2,7	N		0	0	4	4	3	0	0	3	0	0	3	4	Y	3	12	F	17	17
257	M	Y	Y	Y	0	BA	4	1,2,3,5	0		Y	5	2	2	2	2	2	2	2	2	2	2	2	2	Y	5	10	F	17	17
258	M	N	N	N	0	D	2	3,8	1	7	Y	1	0	1	0	0	0	0	0	0	0	0	0	4	Y	5	10	F	16	16
259	M	Y	Y	Y	1	A	2	3,5	6	2,3,4,6,7,12			4	4	4	4	2	4	3	1	2	4	4	2	Y	2	10	M	17	17
260	M	Y	Y	Y	1	A	2	3,8	3	1,3,6	N		4	4	4	2	3	0	0	1	0	0	4	0	Y	4	10	F	15	15
261	M	Y	Y	Y	1	MS	1	3	4	1,3,10,12	Y	4	1	0	1	2	2	1	3	2	4	3	4	1	Y	1	12	M	17	17
262	M	Y	Y	Y	3	BA	5	1,2,3,5,8	7	1,2,3,4,7,12,14	N		0	2	4	3	1	0	4	4	0	0	0	3	Y	3	12	F	18	18
263	M	Y	Y	Y	2	MS	4	3,5,8,9	2	1,3			3	3	3	4	2	3	3	2	1	0	4	3	N		11	M	19	3
264	M	Y	Y	Y	2	D	2	1,3	2	1,12	N		3	3	3	2	3	3	2	1	1	1	1	3	N		12	F	18	18
265	M	Y	Y	Y	1	A	3	1,2,3	1	9	N		1	2	1	1	1	1	0	0	0	0	0	2	Y	2	11	F	17	17

Legend

L = Location

Do? = Know what you want to do

Job? = Participant list a job

Pln = Participant plan to go to PSE

= Number of universities listed

EEL = Expected education level

Hlp = Number of people/groups who help

Hlp Code = People who help

Chl = Number of perceived challenges

Chal Code = Perceived challenges

PED = Parent Education Level

ED Cd = Family education code

Tst = Assistance required with taking tests

Std = Assistance required with learning how to study

FA = Assistance required finding financial aid

App = Assistance required completing a college application

Fnd = Assistance required find a college

Ttr = Assistance required with tutoring

TMg = Assistance required with time management

M$ = Assistance required with managing money

Cmp = Assistance required with using a computer

Wrt = Assistance required with learning to write

Mth = Assistance required with learning to do math

Mjr = Assistance required picking a major

SKP = Did participant skip

SKC = Skip code

EDL = Education level

G = Gender

Age = Age of participant

U.P. = Number of years living in U.P.

Appendix G: Interview Data

Code	Plans	PSE/ Job	Skills	Prep	chall-enges	apply	fin aid	talks about ed	talk? help	talk about	PSE benefit	benefit?	Parent Ed Lvl	ED Lvl Code	talk PSE	talk about?	Crnt Lvl of Ed	Gender	Age	UP	Free/ Reduce	Other Skip?	other do?	you skip?	class Day?	sugge stions?
100	1	PSE	3	1	1	1	0	3	1	2	2	2	Yes	1	2	2	11	M	18	18	2	2	2	2	1	2
101	2	PSE	2	2	2	1	1	2	0	2	2	1	Yes	1	2	2	11	F	16	16	0	2	2	0		1
102	2	PSE	2	2	1	1	0	2	1	2	1	2	Yes	1,4,5	2	2	11	F	17	17	2	0	0	0		2
103	1	PSE	2	1	2	0	1	3	1	1	2	1	No				11	F	17	17	0	2	2	0		0
104	2	PSE	3	1	2	0	0	1	2	1	2	2	No				10	F	15	15	2	2	2	0		2
105	2	PSE	0	2	2	0	0	1	1	2	2	1	No				10	F	16	14	0	2	0	0		0
106	1	PSE	1	1	0	2	0	3	1	0	1	2	Yes	1	2	2	9	F	15	15	2	0	0	0		0
107	2	PSE	4	2	3	0	1	2	1	0	2	1	No				11	F	16	16	2	2	2	0		0
108	1	PSE	3	1	0	1	0	1	1	0	1	0	No				11	F	14	14	2	0	0	0		1
109	1	PSE	2	2	3	0	2	2	1	1	1	2	Yes	3	2	2	11	F	16	16	2	2	0	0		0
110	1	PSE	0	1	1	1	0	3	1	1	2	1	No				12	F	17	16	0	2	2	0		1
111	1	PSE	2	2	3	2	2	3	2	2	2	1	No				12	M	18	18	2	2	2	0		1
112	2	PSE	4	2	3	2	2	3	2	2	2	2	No				12	M	19	19	0	0	0	2	1	2
113	1	PSE	0	1	1	1	1	3	1	1	1	2	No				12	M	18	18	0	0	0	0		0
114	1	PSE	2	1	2	1	0	1	1	1	2	1	No				9	M	14	12	0	2	2	0		0
115	2	PSE	2	1	2	0	1	0			1	1	No				10	F	16	16	2	2	2	0		0
116	1	PSE	3	1	1	1	0	0	1	1	2	2	No				10	F	15	15	0	2	2	0		2
117	1	Job	2	1	1	1	0	2	1	1	1	1	Yes	3	0	0	11	M	18	18	2	2	2	0		1
118	2	PSE	3	1	1	2	0	3	2	2	2	2	No				10	F	16	16	2	2	2	0		2
119	2	PSE	1	0	1	0	0	2	1	1	1	1	Yes	4			11	M	18	18	2	2	2	0		1
120	1	Job	1	1	1	1	1	2	1	1	1	0	No				9	M	15	15	2	2	2	2	2	1

Legend

Plans = Articulation of future plans

PSE/Job = Participant planning job or PSE right after high school

Skills = Skills needed for future

Prep = How is participant preparing for future

Challenges = What are participant's perceived challenges

Apply = What do you know about applying to PSE/a job

fin aid = What do you know about applying for financial aid/a loan

talks about ed = Who talks to participant

about education

PSE benefit = Articulation of PSE benefits

Benefit? = Will PSE benefit participant

Parent Ed Lvl = Parents education level

ED Lvl Code = Parents education level code

talk PSE = Who talks to participant about PSE

Crnt Lvl of Ed = Participant's current level of education

Gender = Participant's gender

Age = Participant's age

U.P. = How long has participant lived in U.P.

Free/Reduced = Does participant receive free/reduced hot lunch

Other Skip? = Does participant know someone who skipped

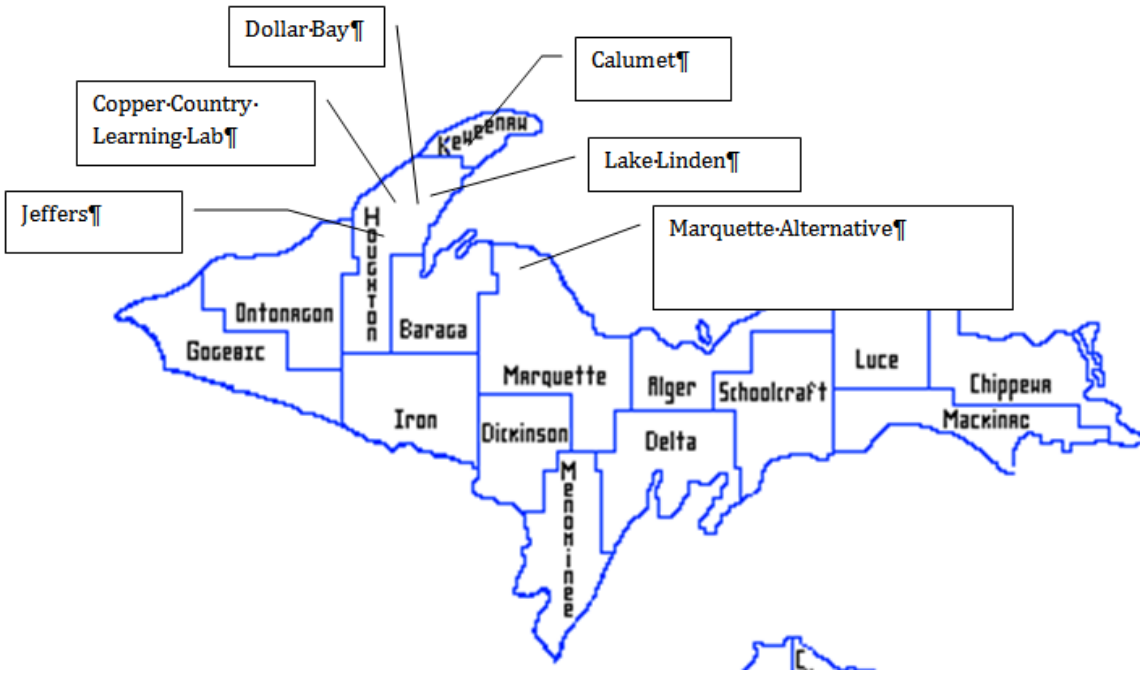
other do? = What did they do when they skipped

you skip? = Did participant ever skip?

Class/day = Skip for a class or day

Suggestions? = Articulation of suggestions for educational professionals

Appendix H: Map of the U.P. by County



Note. Finlandia University's Upward Bound program serves students in the Houghton, Keweenaw, and Baraga county high schools.

This map was adapted from an image on Michigan.gov website. *Base map by county.* Found on February 17, 2010 from http://www.michigan.gov/cgi/0,1607,7-158--118145--,00.html